



AL ZAYTOONAH UNIVERSITY OF JORDAN
Faculty of Engineering and Technology



ABET Surveys Report

2017-2018

Exit Survey

To enhance the student learning experience in the engineering and technology faculty and to measure the continuous improvement as one the ABET requirements; a student exit survey has been conducted from 22th May to 26th of June, 2018. 85 graduate students filled the survey online using Google forms. 19 questions have been prepared. Four levels of choices have been implemented for 18 questions. These choices are as in Table 1. One question has only three choices.

Table 1: The choices for each question

Level	Description
1	Fair
2	Good
3	Very Good
4	Excellent

The questions in this survey are utilized to assist ABET students' outcome in the engineering faculty which are 7 outcomes. Other questions are used to assist the overall experience of the students. The following sections show the results of assisting each one of these outcomes.

1- Basic Sciences and Solving Engineering Problems

Four questions have been utilized in this section to assist ABET outcome '1', which defined as, *“an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics”*. These two questions are as follows

1.1 Do you agree or disagree that the program provided you with the ability to apply mathematical concepts to solve technical problems?

Figure 1 shows the result of this question. We can observe that most of the students selected “Very good” with 40% and “Excellent” with 20%. This show that 60% of the students have confidence in their math skills

1.2 Do you agree or disagree that the program provided you with the ability to apply basic science concepts to solve technical problems?

As in Figure 1, Figure 2 shows student indirect assessment of basic sciences. We can observe that student confident level is higher than 62% in basic sciences as in mathematics.

1.3 Do you agree or disagree that the program provided you with the ability to apply engineering science concepts to solve technical problems?

Figure 3 shows the results of engineering skills. The “Excellent” selection reached 24.7% and the “Very good” selection is 47%. The overall confident is higher than 70%.

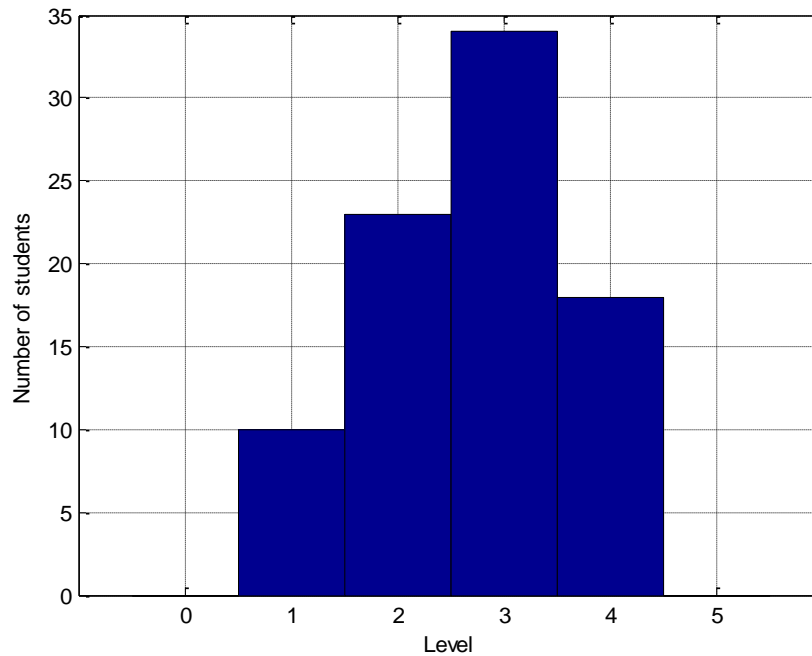


Figure 1: Math Skills

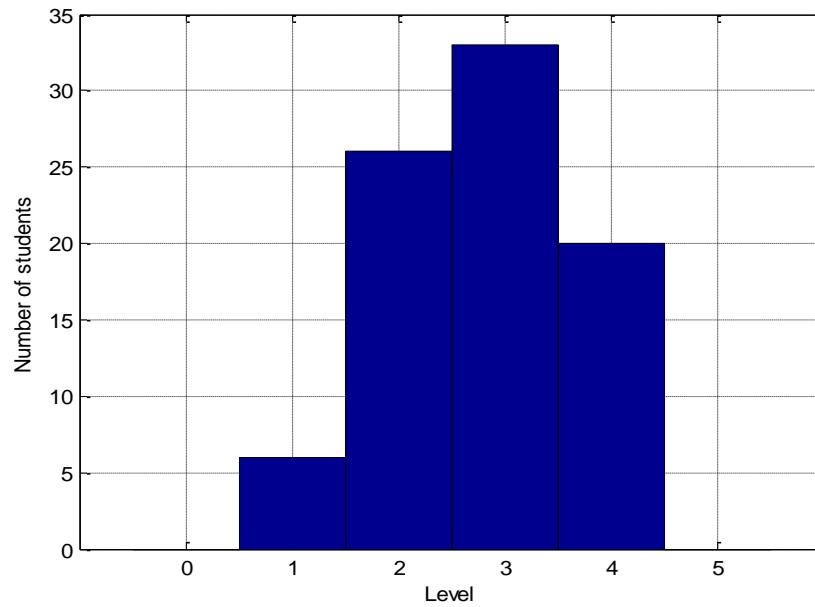


Figure 2: Basic Sciences

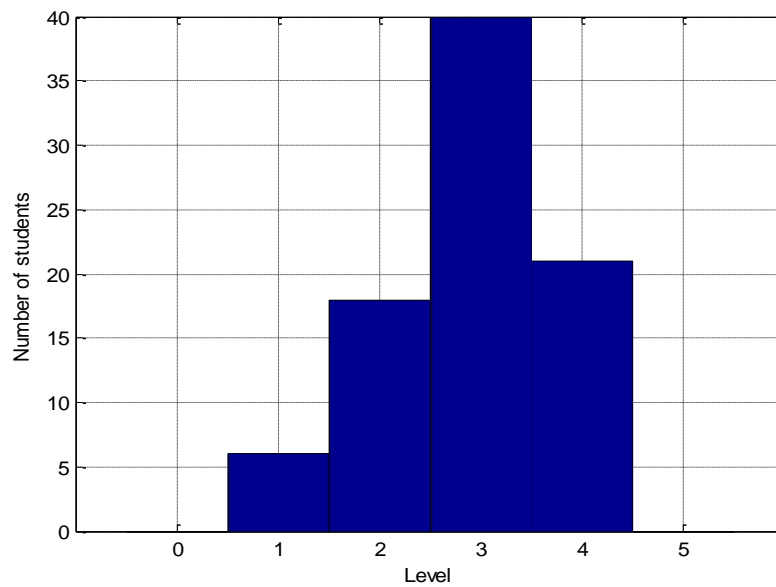


Figure 3: Engineering Basic Skills

1.4 Do you agree or disagree that the program developed your ability to think logically and to solve analytical problems?

Figure 4 shows the results for this question. 39% of the students selected “Very good” and 29.4% selected “Excellent”.

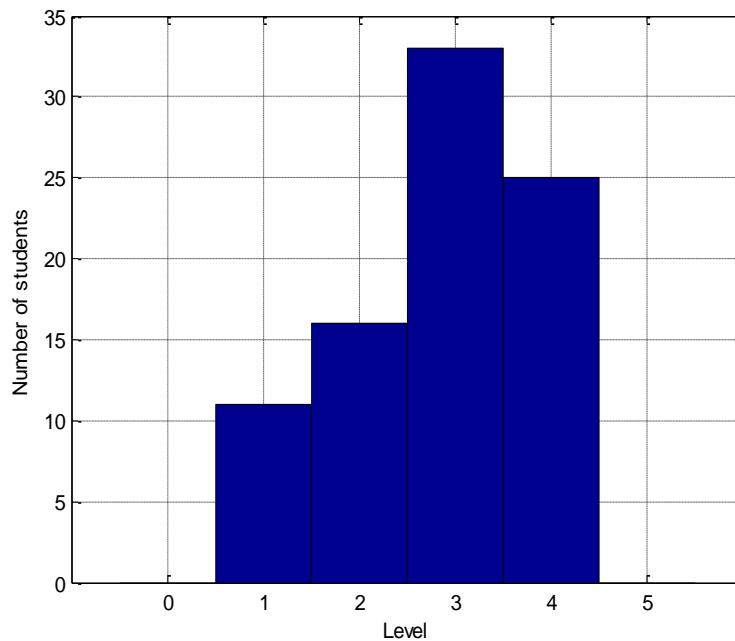


Figure 4: Solving Engineering Problems

2- Engineering design

One question has been used to assist student outcome ‘2’, which defined as, “*an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors*”, This question is

Do you agree or disagree that the program provided you with the ability to design a system or process to meet a desired objective?

Figure 5 shows the result for this question. As in basic sciences, the students are confident in their designing skills for systems or processes.

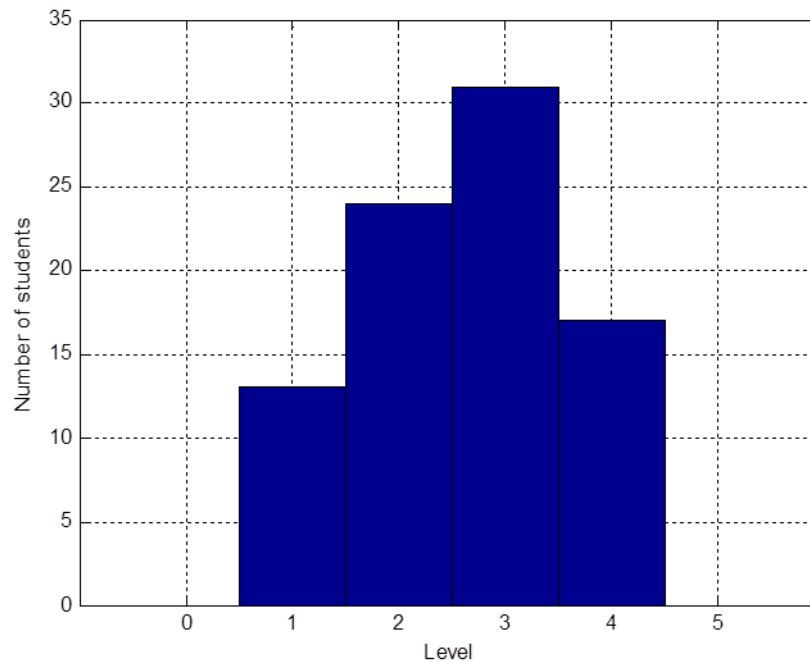


Figure 5: Engineering design

3- Communication Skills

Two questions have been used to assist outcome '3', which defined as, “*An ability to communicate effectively with a range of audiences*”. The following two subsections show the results of them.

3.1 Do you agree or disagree that the program provided you with an adequate level of interaction with engineering faculty?

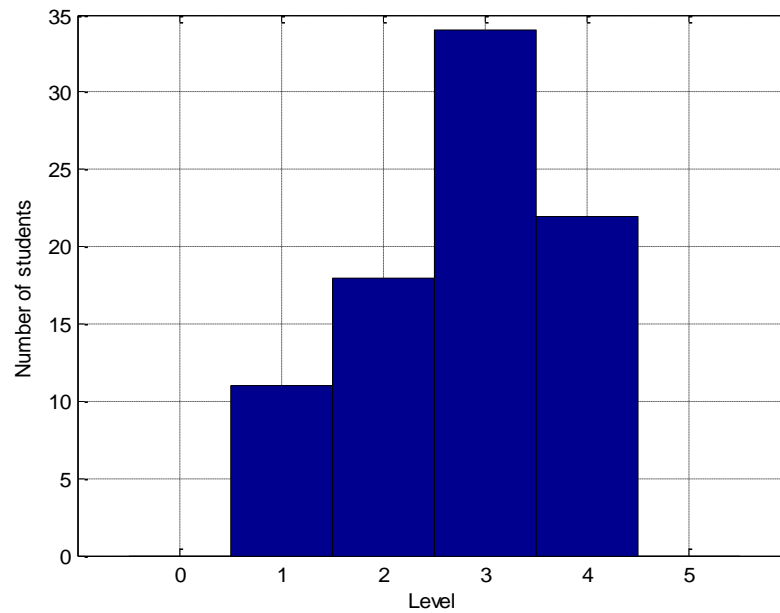


Figure 6: Interaction

Interaction is a kind of communication skills. It is result in Figure 6 shows similar results as in the basic sciences. This shows that the learning process in our faculty cares of all outcomes.

3.2 Do you agree or disagree that the program provided you with appropriate technical communication skills?

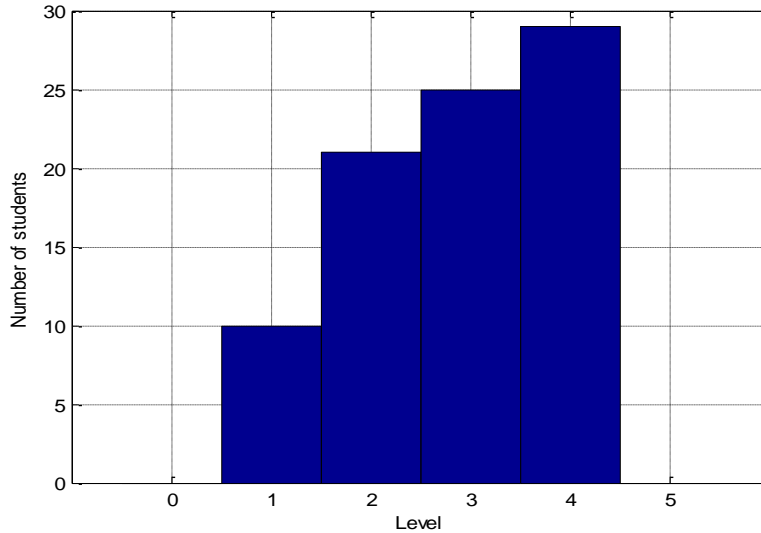


Figure 7: Communication Skills

Figure 7 shows the result of the communication skills. We can observe that students have confident in their communication skills “writing or oral” by 64%. For more enhancements, it is required to emphasize more on English language classes “101” and technical writing class.

4- Ethics and professionalism and Engineering Impact

Three questions have been used to assist outcome ‘4’, which defined as, “*an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts*”. The following two subsections show the results of them.

4.1 Do you agree or disagree that the program provided you with adequate knowledge and skills to succeed in your chosen profession?

Figure 8 shows the result of this question. More than 61% of the students selected “Very good” and “Excellent”.

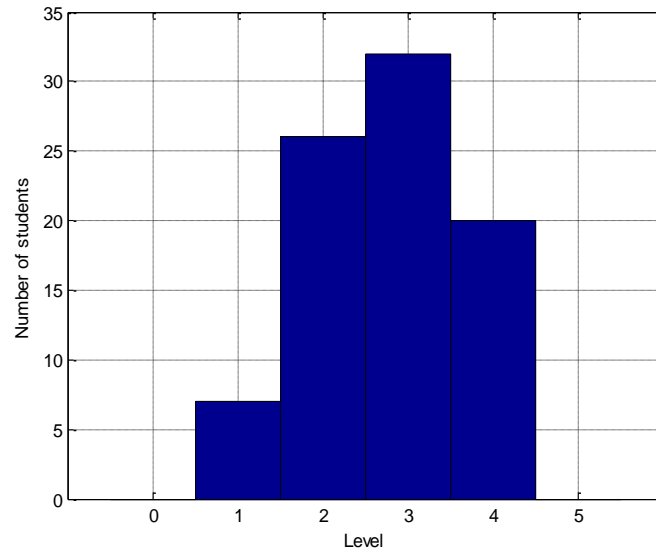


Figure 8: professionalism

4.2 Do you agree or disagree that the program developed your respect for ethical practice and professionalism?

Figure 9 shows the results of this question. We can observe that more 69.4% of the students are confident in their knowledge of engineering ethics. However, improvement is required to reach a higher percentage. This can be fulfilled in the Engineering Ethics and Technical Writing class.

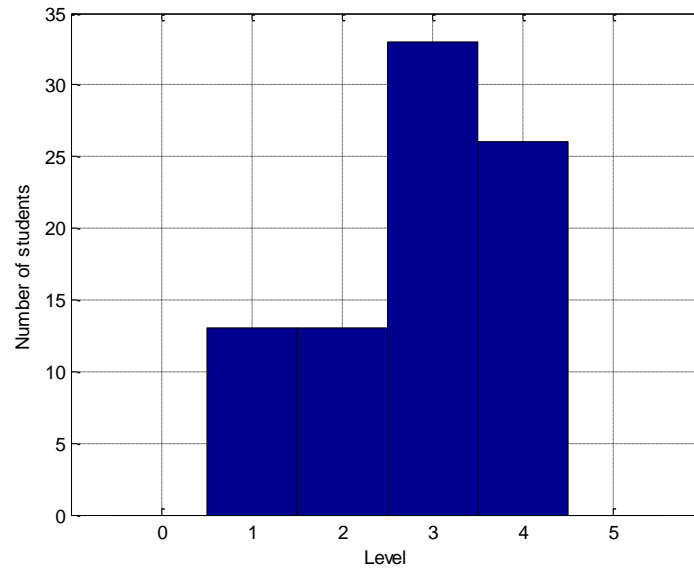


Figure 9: Ethics and professionalism

4.3 Do you agree or disagree that the program provided you with an appreciation of the impact of engineering solutions in a global economic/societal context?

Figure 10 shows the result for this question; we can notice that the students have some weaknesses in understanding the impact of engineering solutions in economic and social context. This can be improved in Engineering Economy and the last year subjects.

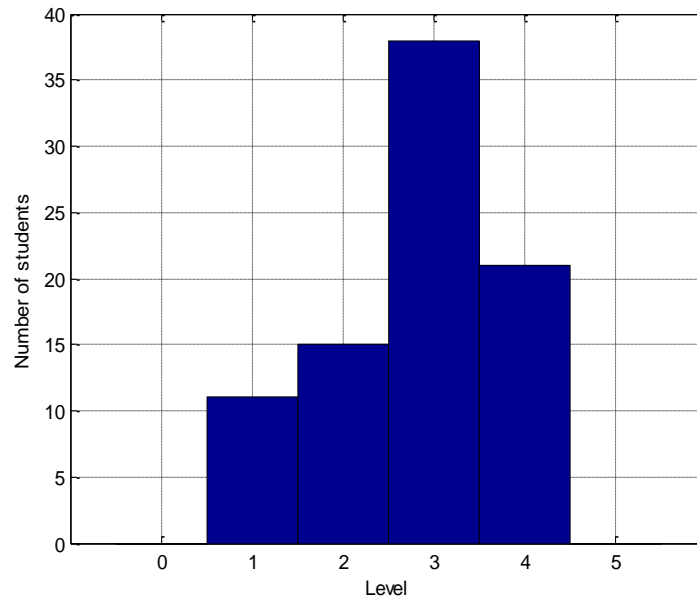


Figure 10: Engineering Impact

5- Team Works

One question has been used to assist student outcome '5', which defined as, "*an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives*", this question is "Do you agree or disagree that the program developed your ability to effectively work on a team?"

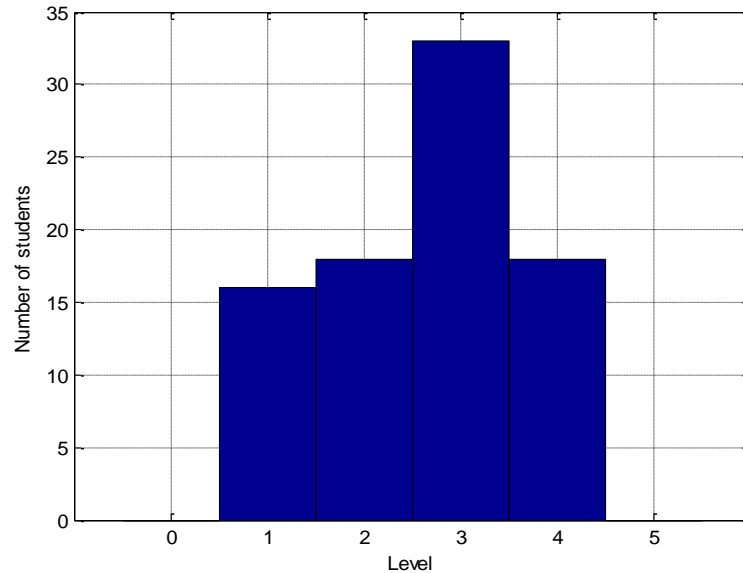


Figure 11: Team Work

Figure 11 shows the results of assisting student outcome ‘5’; we can observe from the figure that the students are 60% confident in their “team player” skill. This confidence can be improved in Labs, graduation project and in-term projects.

6- Experimentation

Three questions have been used to assist outcome ‘6’, which defined as, “*an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions*”. The following two subsections show the results of them.

6.1 Do you agree or disagree that the program provided you with the ability to design and conduct meaningful experiments to gather data?

In Figure 12 we can observe that the students’ confidence level in conducting and designing experiments is lower than basic sciences skills”. 32.9% of the students selected “Excellent” and 36.47% of them selected “Very good”. The overall confidence is higher than 69%.

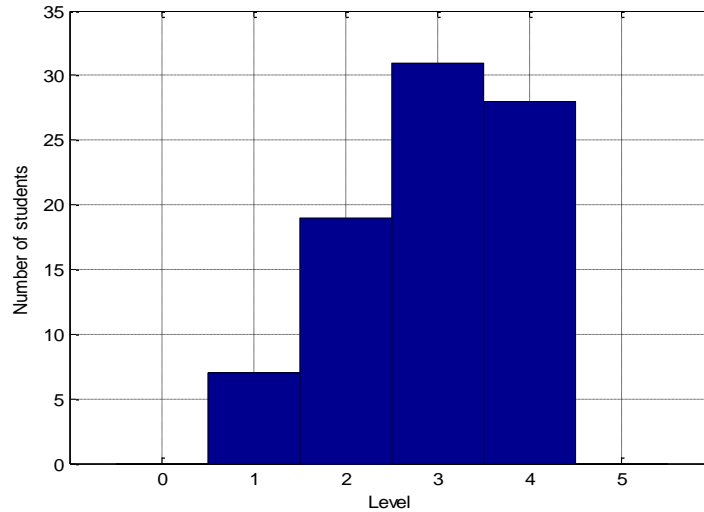


Figure 12: Design Experiments

6.2 Do you agree or disagree that the program provided you with the ability to analyze and interpret experimental data?

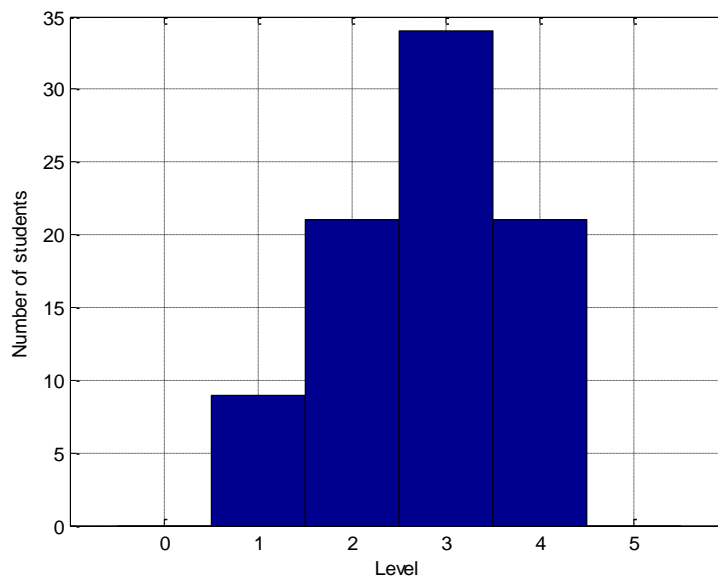


Figure 13: Data Interpretation skill

Figure 13 shows the results of experimental data interpretation students' skills. We can observe that most of the students selected "Very good" with 40% and "Excellent" with 24.7%. This shows that 64.7% of the students have confidence in their Data Interpretation skill. Figure 4 and 5 shows that

the students are more confident in designing experiment than digging information from the harvested data. This requires data visualization, statistical analysis, Matlab and computer skills revisions.

6.3 Do you agree or disagree that the program provided you with adequate lab equipment and facilities to complete your study?

This question is a facilities and services assessment question. We attempted to measure the student satisfactory level of the labs and their equipment. As shown in Figure 14, we can observe that 28.23% of the students selected “Excellent” and other 44.7% selected “very good”. This show that 72.9% of the students agreed that the program provided the adequate lab equipment and facilities to complete study.

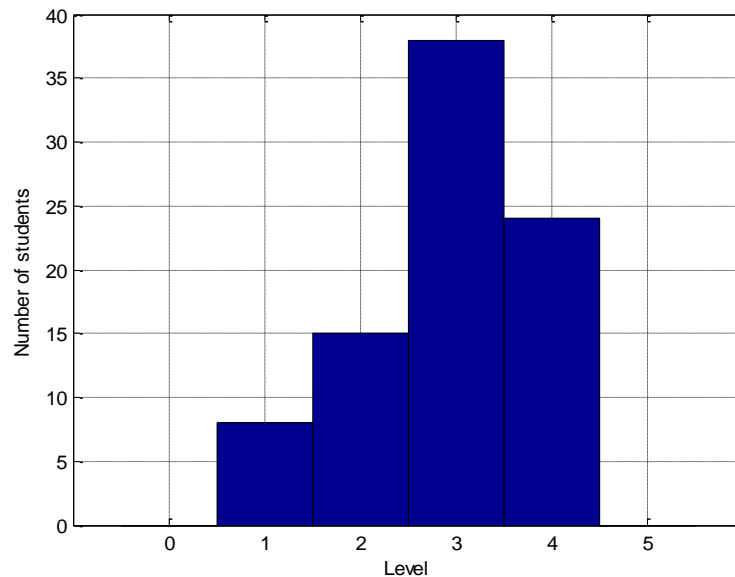


Figure 14: Lab Tools

7- Life-long Learning

Two questions have been used to assist outcome ‘7’, which defined as, “*an ability to acquire and apply new knowledge as needed using appropriate learning strategies*”. The following two subsections show the results of them.

7.1 Do you agree or disagree that the program developed your appreciation for the need for lifelong learning through self-study, professional society programs, and/or graduate courses?

Figure 15 shows the result of this question. We can observe that the students have a good confident in their lifelong learning skills. However, another question has been used in this category. This question shows how this skill can help in studying a graduation and post grad studies. This question is show in the next subsection.

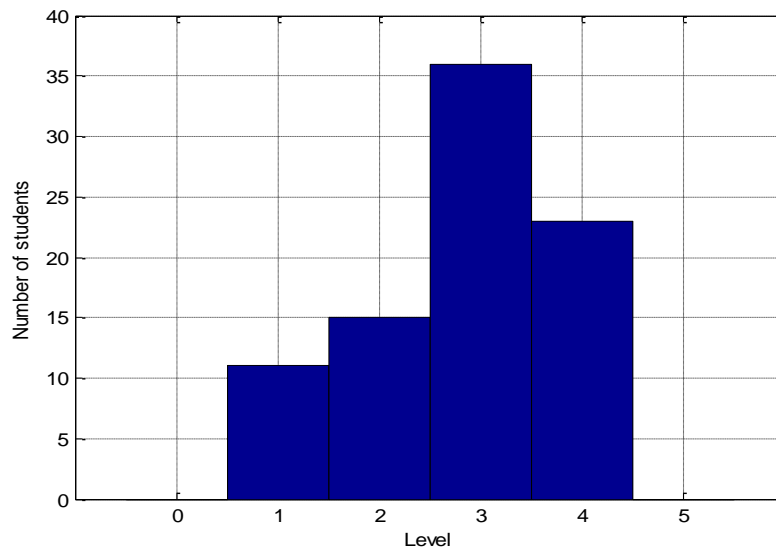


Figure 15: Life Long Learning Skill

7.2 Do you agree or disagree that the program provided you with adequate academic preparation to enter a graduate degree program?

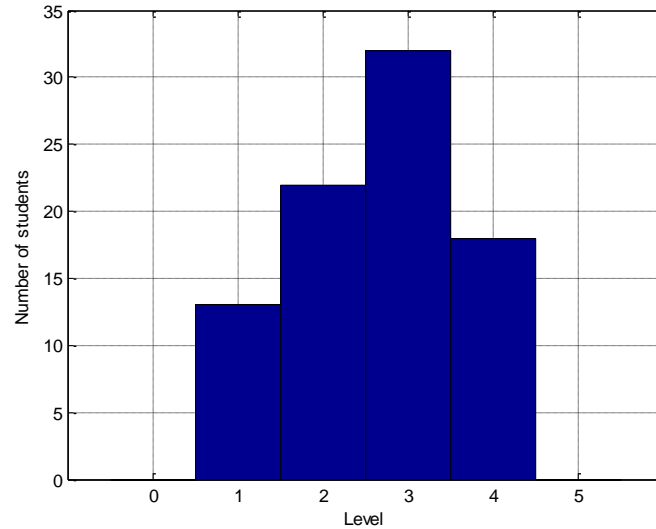


Figure 16: Graduation Studies

Figure 16 shows the result of this question. This question is a hard question to answer since it measures or assists three different outcomes, “3”, “4” and “7”. We can observe that students have self-confident in their skills to continuo their graduation studies.

8- After Graduation Guidance

Two questions have been used in this section. This questions as follows

8.1 Do you agree or disagree that the program provided you with knowledge of the various professional and technical organizations available to you in your field of engineering?

Figure 17 shows the harvested results of this question.

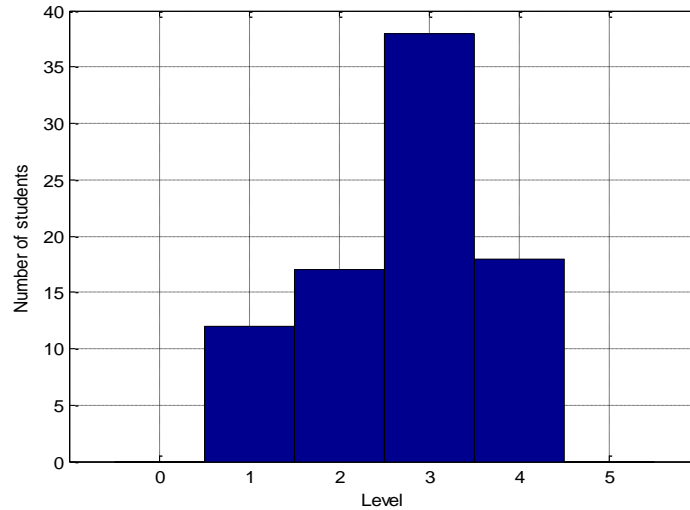


Figure 17: After Graduation Services

8.2 Do you agree or disagree that the program provided you with an awareness of the variety of career opportunities available to graduates in your major?

Figure 18 shows the result of this question. The result shows that after graduation guidance's for students require improvement

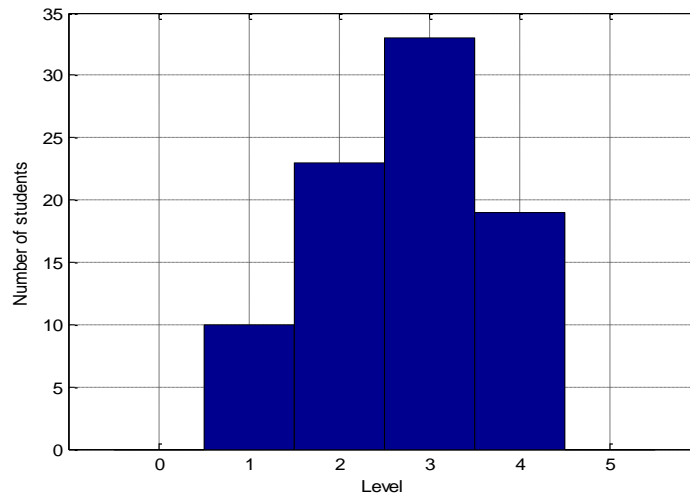


Figure 18: Career Awareness

9- Overall Assessment

Two questions have been used in this category. One to measure the student satisfactory level of the faculty and the second to show the impact of this satisfactory on recommending his/her major to other students. Figure 19 shows the overall satisfactory level of the graduate students. We can observe that 74% of the students recommend their majors to other students.

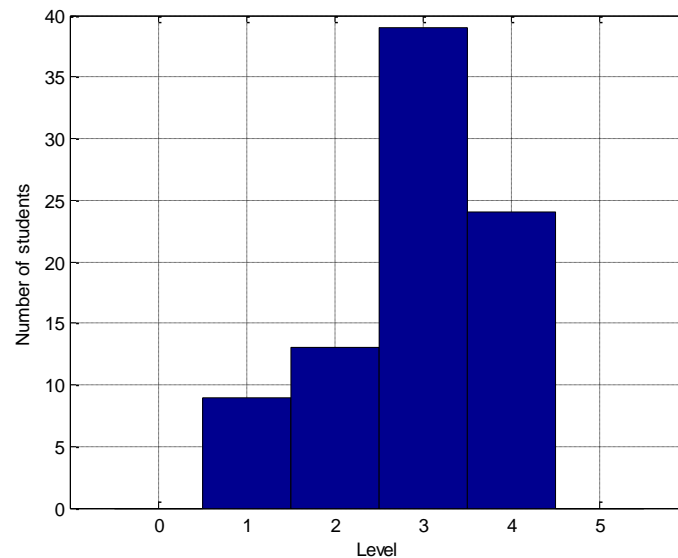


Figure 19: Overall Satisfactory level

Figure 20 showed that 59% of the students believe that the program provided the adequate academic preparation to enter a graduate degree program. Moreover, from Figure 21 we can observe that 75% of the students recommend their majors to other students.

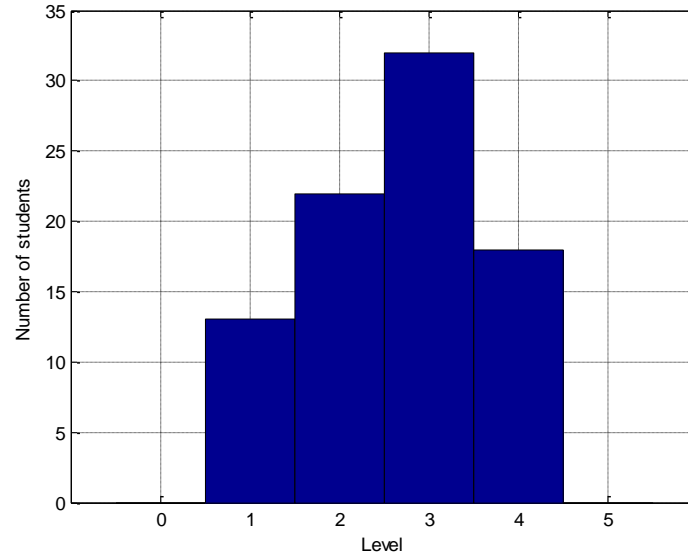


Figure 20: Preparation to enter a graduate degree program assessment

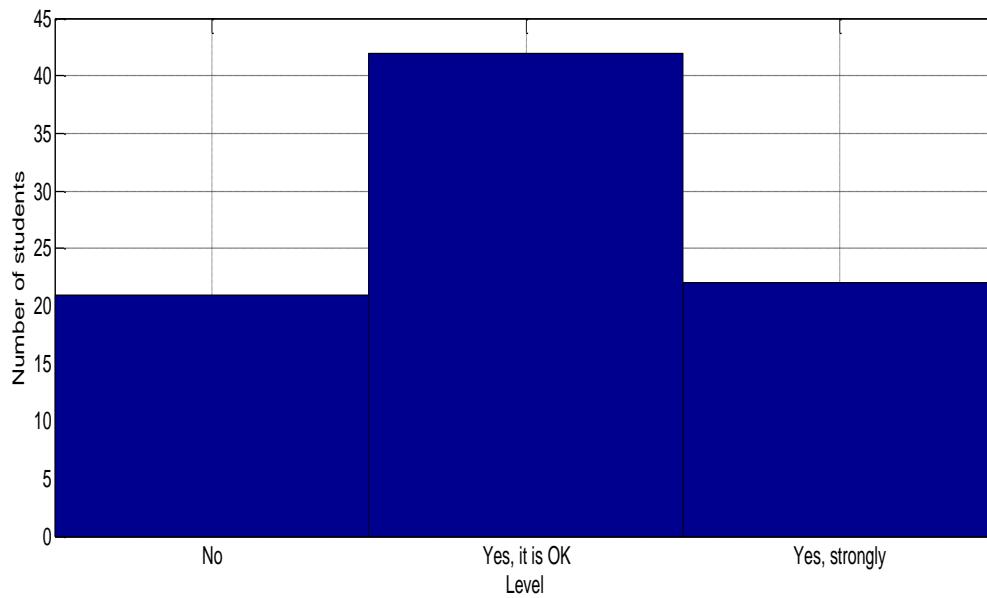
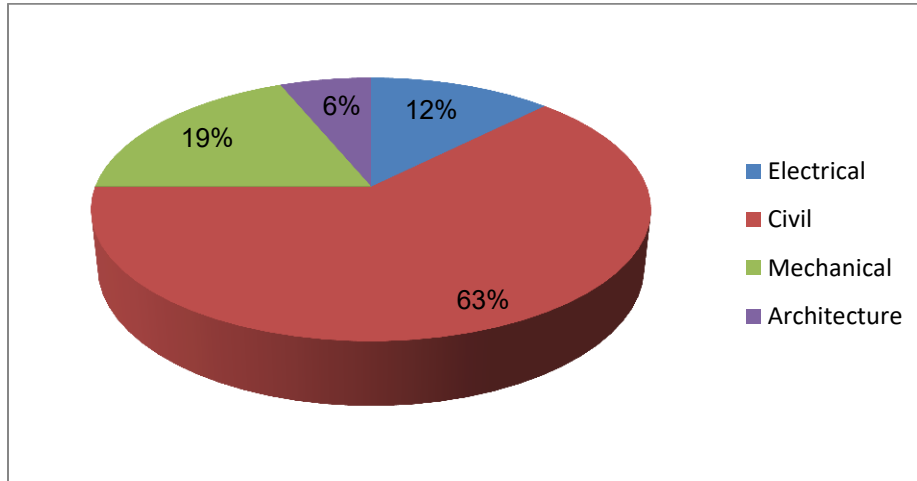


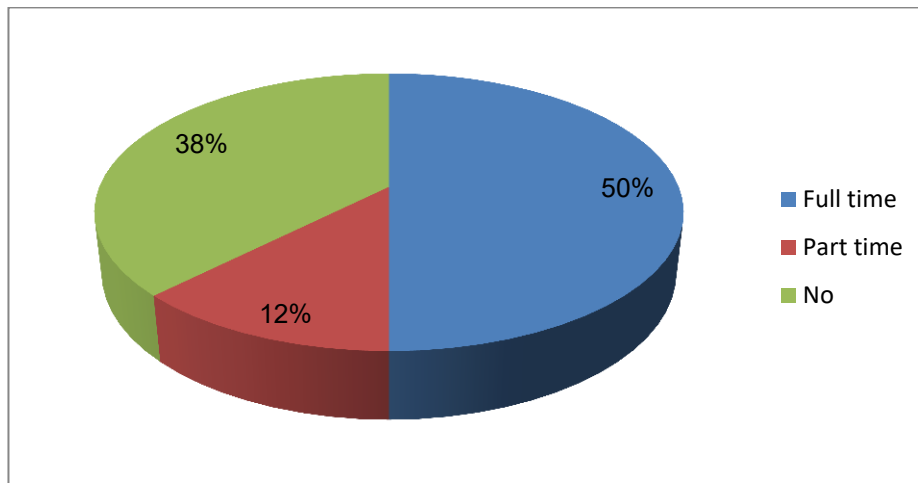
Figure 21: Recommending his/her major to other students

Alumni Survey

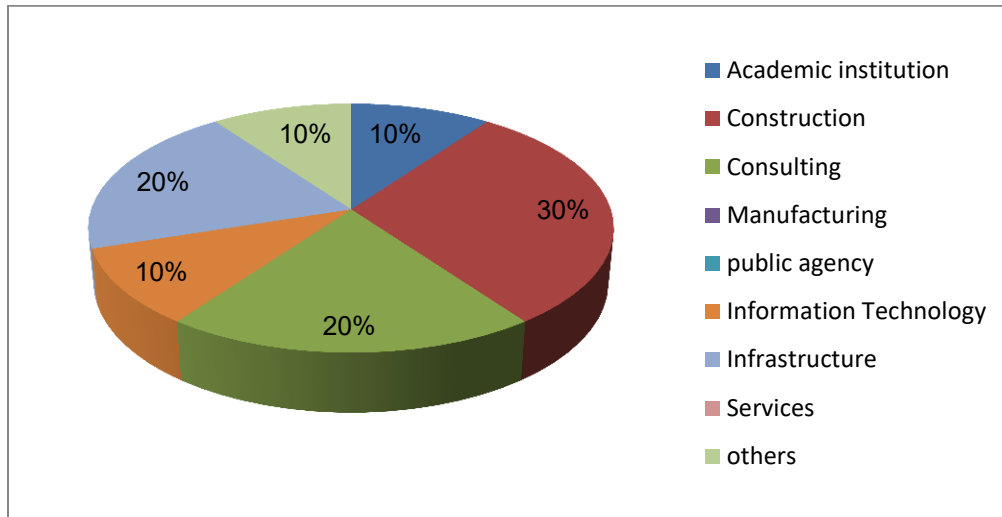
1- What was your undergraduate major at Al Zaytoonah University of Jordan?



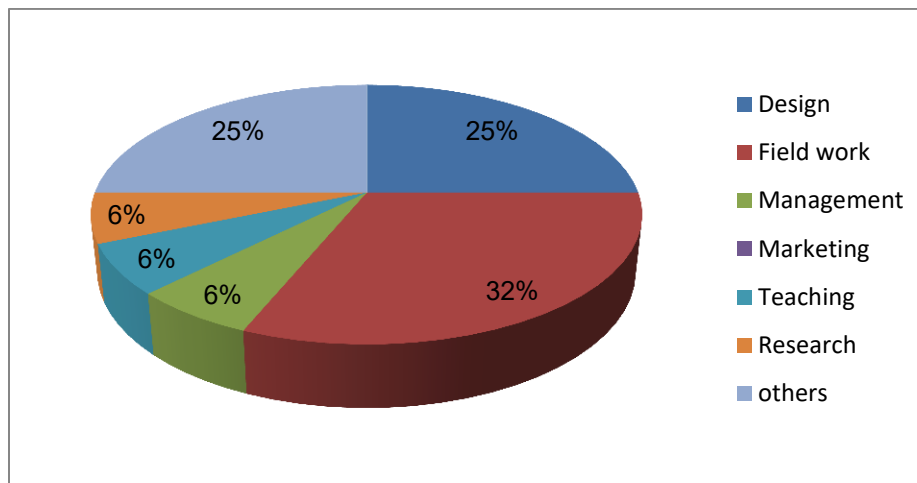
2- Are you currently employed (include military service, internships, graduate assistantship)



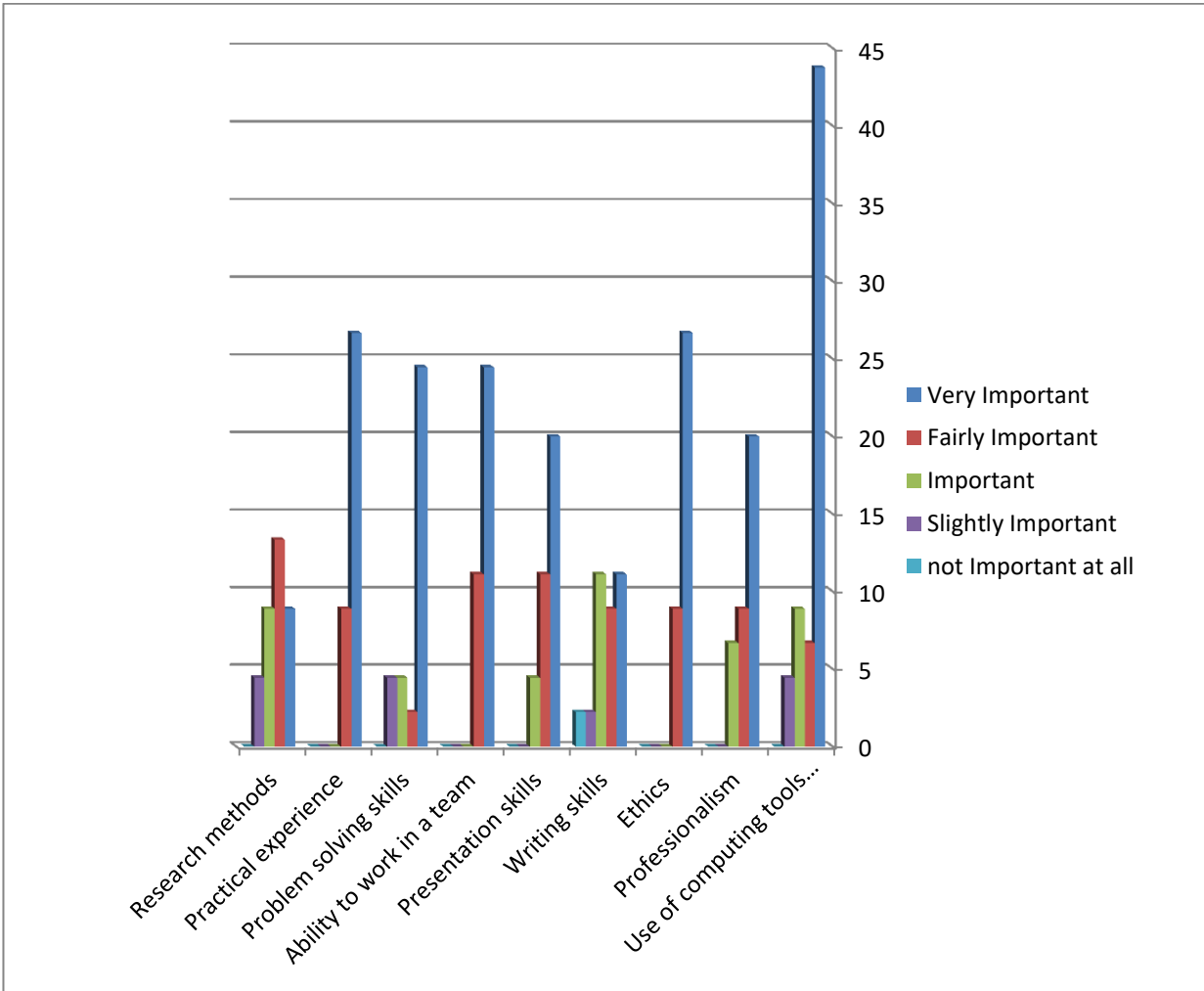
3- What type of organization is your employer?



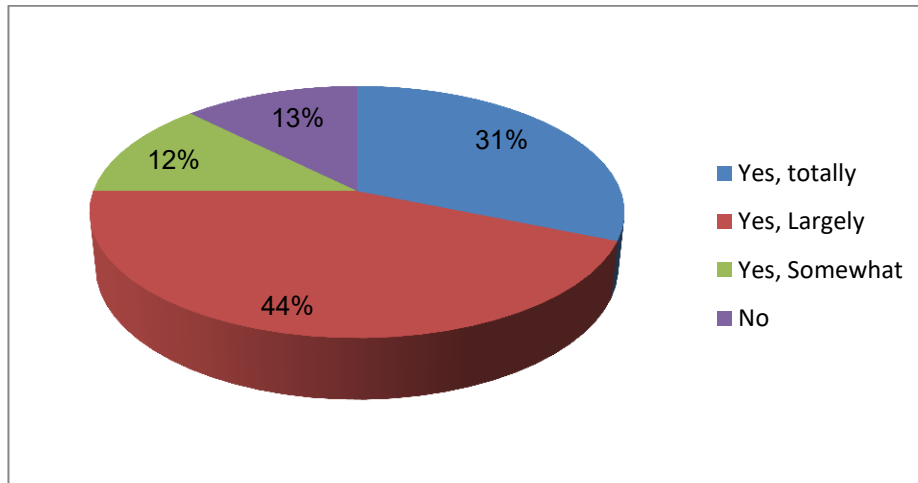
4- What are your major responsibilities?



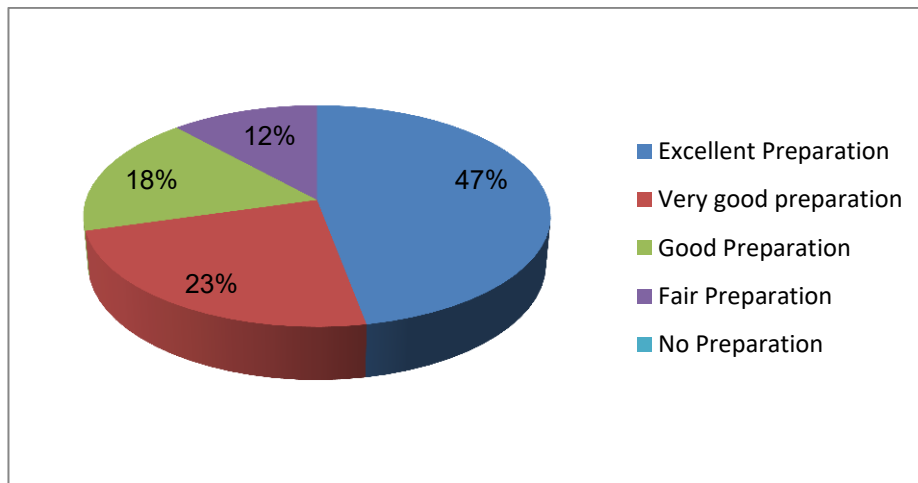
5- Please indicate which workplace skills are important to you



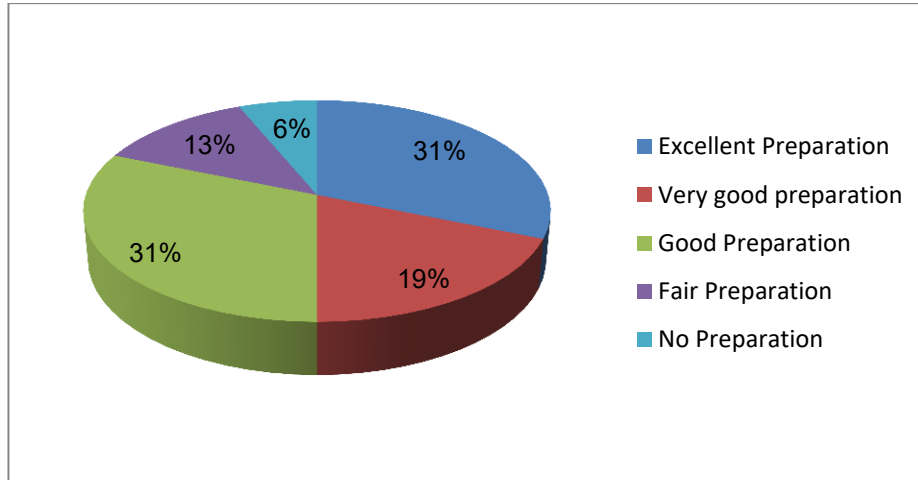
6- Did your undergraduate program of study at ZUJ meet your educational goals?



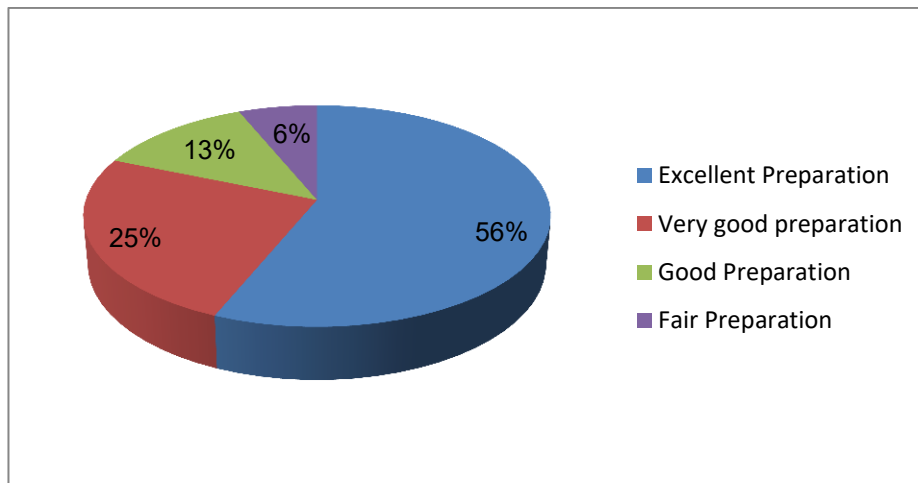
7- Rate your level of preparation as a result of your engineering education at ZUJ plus your work experience to date: to successfully identify, analyze, formulate, and solve engineering problems associated with your professional position, both independently and in a team environment.



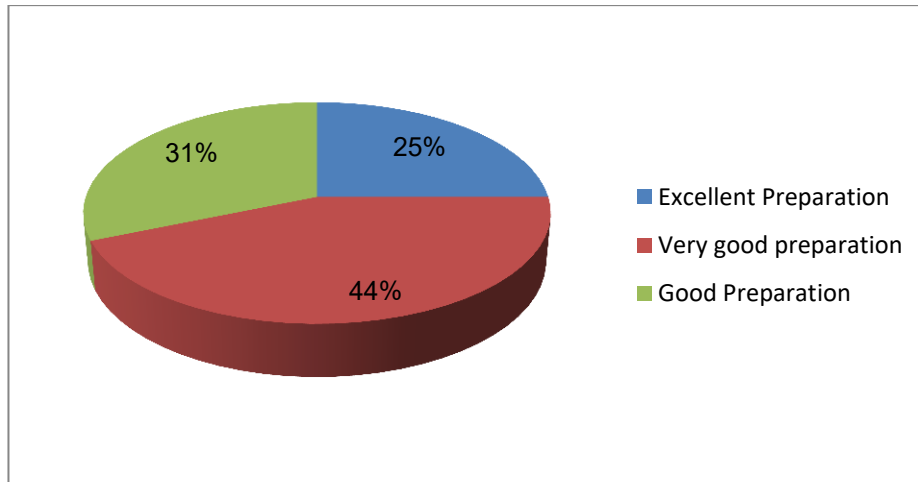
8- Rate your level of preparation as a result of your engineering education at ZUJ plus your work experience to date: Using a broad systems perspective, manage multifaceted and multi-disciplinary engineering projects with significant economic, legal, regulatory, social, and environmental consideration



9- Rate your level of preparation as a result of your engineering education at ZUJ plus your work experience to date: Communicate effectively with colleagues, clients, and the public.



10- Rate your level of preparation as a result of your engineering education at ZUJ plus your work experience to date: Engage in lifelong learning, professional development, leadership, and public service



11- Which of the following have you engaged in since graduation

Activity	Number
Professional workshops and training courses.	7
Graduate or additional undergraduate course work.	6
Completed graduate, professional, or second undergraduate degree.	3
Professional society membership.	2
Professional society activities beyond membership, such as technical committees, serving as an officer or organizing meetings, etc.	1
Public service activities such as civic clubs, community volunteer work.	2
Passed the Fundamentals of Engineering Examination.	5
Passed the Professional Engineer Examination.	1



Facilities Survey



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Introduction

An online facility survey has been conducted to assist and measure the satisfactory level of the electrical engineering department of the university services. The survey consisted of 65 questions assists different services. These services are

- Registration Service
- Library
- Catering
- Bookshop
- Transportation
- Bathrooms
- Medical Center
- E-learning
- Computer Labs
- Car parking
- Other Services

These services have been divided into 6 main categories. In each category, at least one question has been used to assist it. The survey questions are divided into two main groups. The first group includes multiple choice questions that have 6 levels or choices. These answers are shown below.

Poor	Adequate	Pass	Good	Very good	Excellent
0	1	2	3	4	5

The Second kind of questions is the list questions. In this kind, the students are allowed to select different answers for the same question.

The satisfactory criterion utilized in this survey is as follows:

- 50% of the students select “Very good” or “Excellent”.

123 Students took the survey in May, 2018. The calculated results have been analyzed in the following sections.

1- Library Service

Library service is divided into two main categories, the university library and books’ shops. In the following sections we will assist these two services.

1.1- Books' Shops

Four questions have been used in this category. The following subsections and figures show the results of these questions. The satisfactory level of the students in this category is 47% on average. The bookshops should enhance their services by providing more text books and work for longer time.

1.1.1- The provision of books in the bookshop

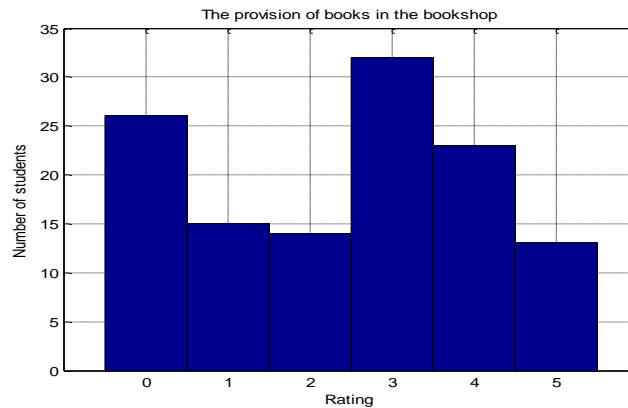


Figure 1: The provision of books in bookshop

1.1.2- The bookshop opening hours

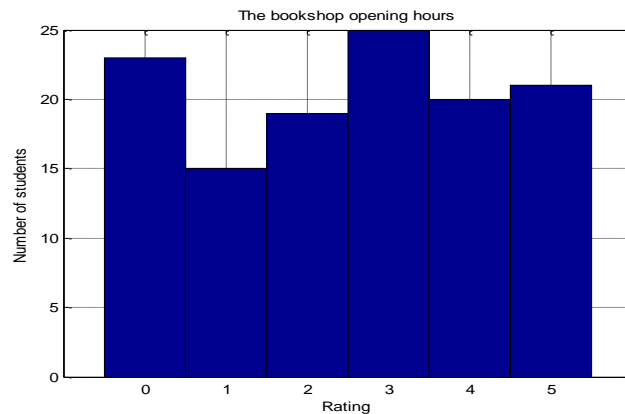


Figure 2: Opening Hours

1.1.3 The prices at the bookshop

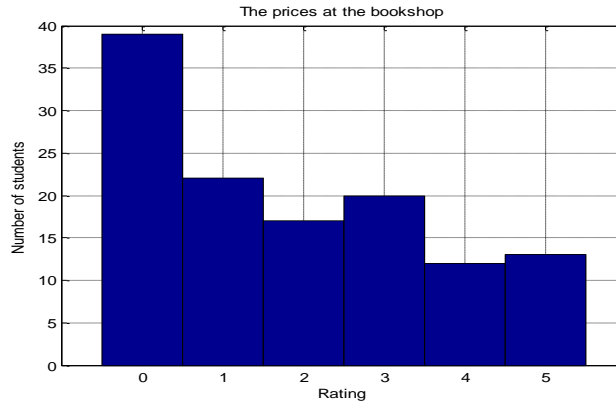


Figure 3: Books Prices

1.1.4 The helpfulness of the bookshop staff

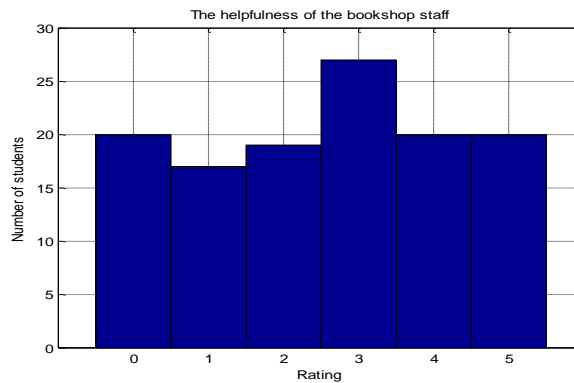


Figure 4: Helpfulness of the bookshop staff

1.2 Library Service

Ten questions have been used to assist and measure the effectiveness of university’s library. The first question was utilized to measure the students’ frequency usage of the library. Figure 5 shows the result of this question. We can observe that 20% of the students did not attempt to visit the library at all. In addition, we found that 30% of the students frequently use the library. The next nine questions of library’s services assessment results are shown from Figure 6-14. However, overall the students should be encouraged to visit the library and obtain benefits from library resources and services.

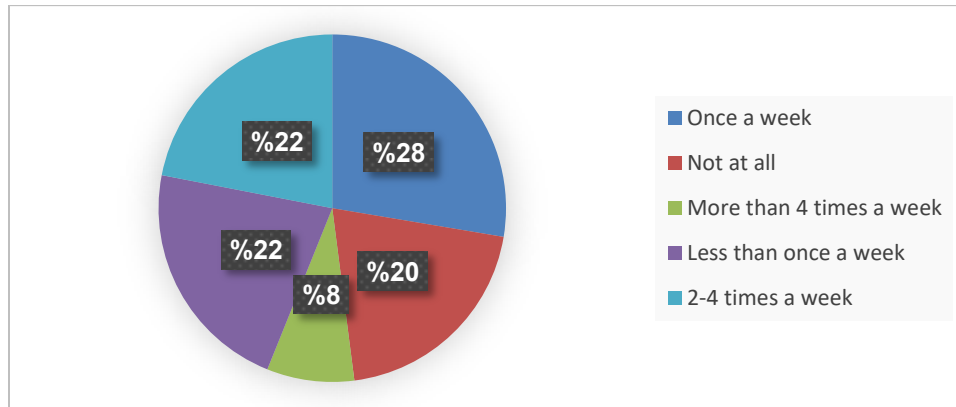


Figure 5: Library Usage

The next nine questions are as follows:

1.2.1 The helpfulness of the library staff

Figure 6 shows the results of this question. We can observe that 61% of the students are satisfied with the helpfulness of the staff.

1.2.2 The availability of journals and books in your subject area

Figure 7 shows the results of this question. The satisfactory level is 63%. The students' comments were that the numbers of copies of the required book is limited. The students attempted to book them in the beginning of the semester until the end of it. We recommend a new booking policy for the library to solve this issue.

1.2.3 The provision of study space

Figure 8 shows the results of this question. The satisfactory level is 54%. The students are satisfied with the study space of the library. However, if we read the data of the first graph again, we will find that only 26% of the students may answer this question. These students were fully happy with the study place of the library. Do not forget that with the percentage of the first figure, the library is not congested.

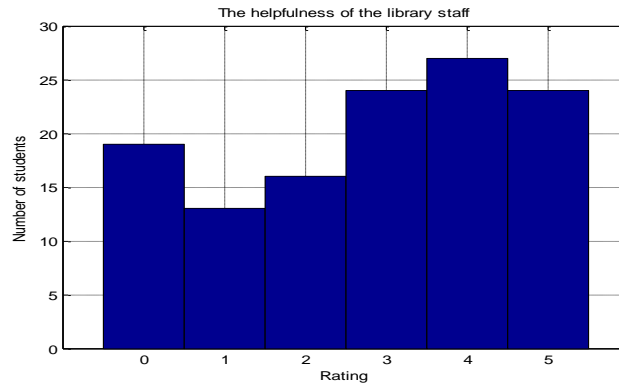


Figure 6: Staff Helpfulness

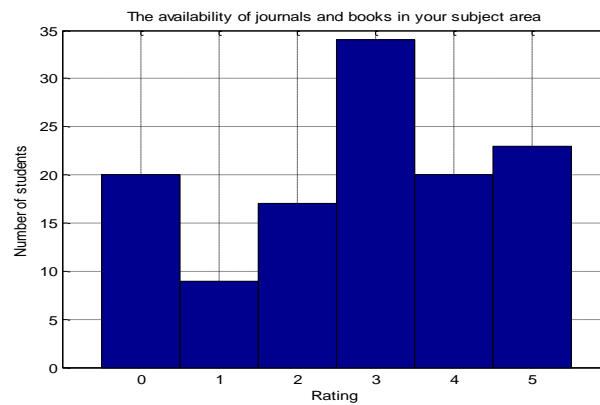


Figure 7: Books Availability

1.2.4 The content of the library information leaflets

Figure 9 shows the results of this question. The satisfactory level is 56%. The library should provide more information in the leaflets to enhance students' satisfactory level and to show their services in a better way.

1.2.5 The provision of library e-resources

Figure 10 shows the results of this question. The satisfactory level is 51.2%. The e-resources have to be enhanced to provide more E-books, searching techniques and a better GUI.

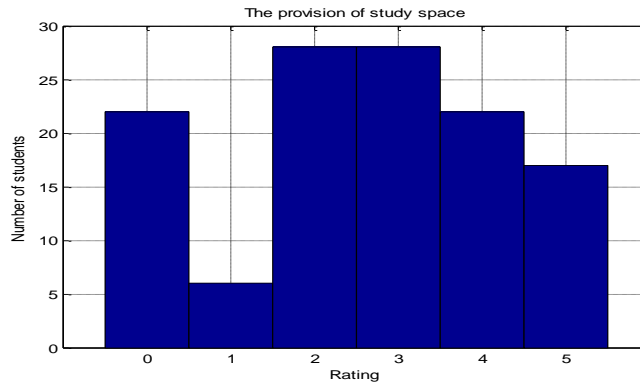


Figure 8: Study Space

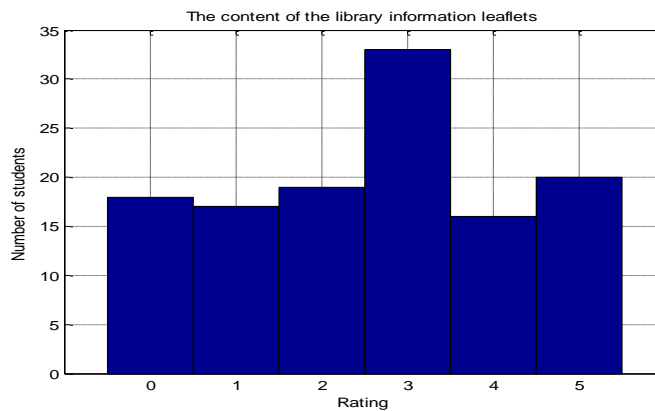


Figure 9: Leaflet Information

1.2.6 The availability of photocopying machines

Figure 11 shows the results of this question. The satisfactory level is almost 46%. Students' comments were that the library has no photocopier. When we asked the other students they answered that there is a machine in the library. This conflict has been created due to the leakage in library leaflets and e-resources information. If these services are enhanced, no problem will exist in this question.

1.2.7 The efficacy of library search tools

Searching tools in the library are divided into two main categories. Finding library resources and finding books. For finding resources, we found that the information is not enough. However, for book searching, figure 12 shows the result of students' satisfactory level. 59.3% of the students are satisfied. To enhance the searching process, e-resources and GUIs should be implemented.

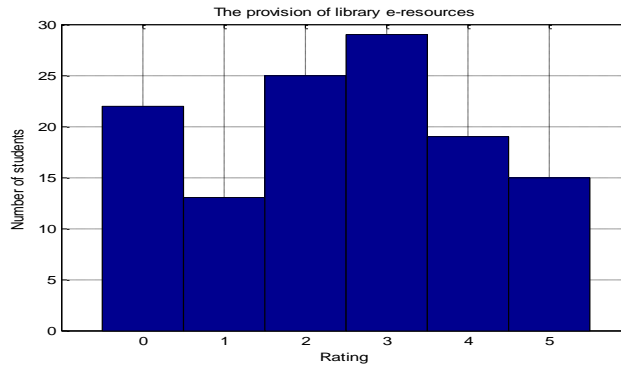


Figure 10: Library E-resources

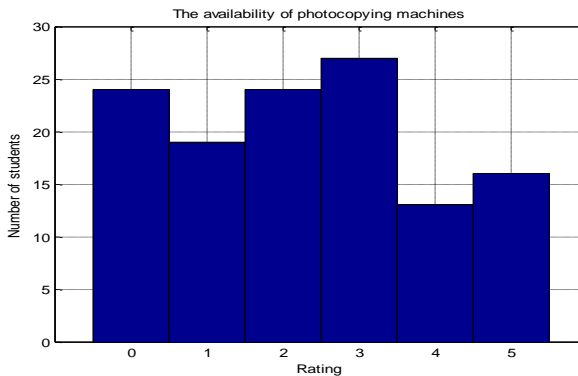


Figure 11: Library Photocopier

1.2.8 The extent to which ZUJ library meets your academic and intellectual needs

Figure 13 shows the results of this question. The satisfactory level is 57.7%.

1.2.9 The library opening hours

Figure 14 shows the results of this question. Students are satisfied with 63.4% of the working hours of the library

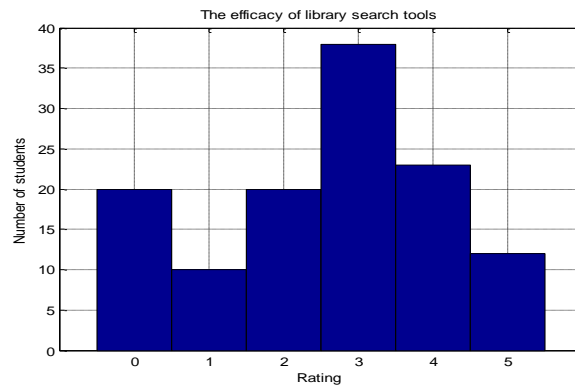


Figure 12 Library Searching Tool

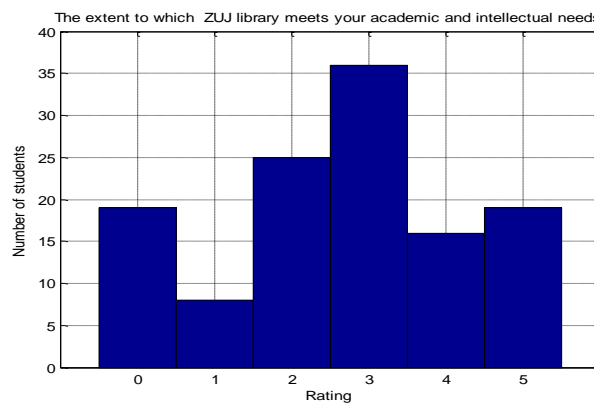


Figure 13: Academic Needs

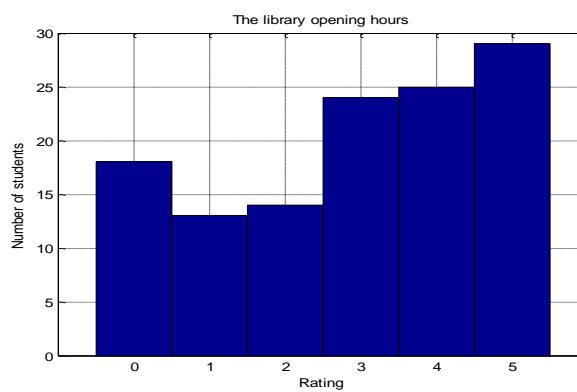


Figure 14: Opening Time

2- Catering Services

6 questions have been asked in this category. These questions are as follows

- The cleanliness of catering outlets
- The comfort of catering outlets
- The opening hours of catering outlets
- The helpfulness of catering staff
- The quality of food and drinks
- The price of food and drinks

Figures 15, 16, 17, 18, 19 and 20 show the histogram of the results. We can observe that the students are not satisfied with the price of the food and drink and they are satisfied with the staff and the quality.

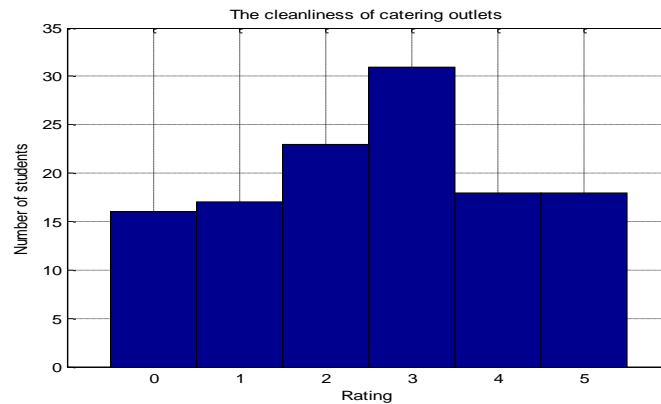


Figure 15: Cleanliness

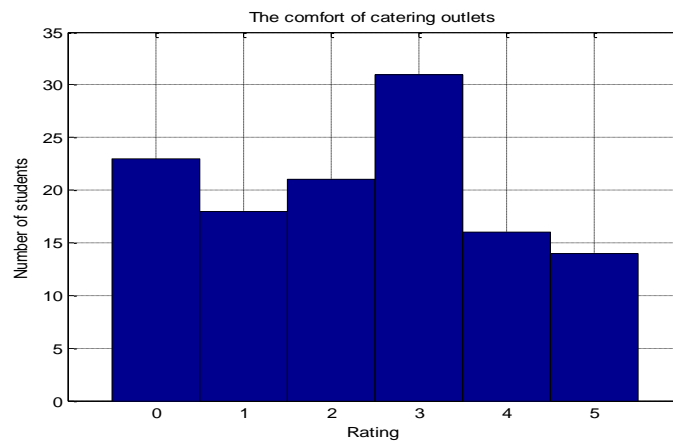


Figure 16: Comfort-ability

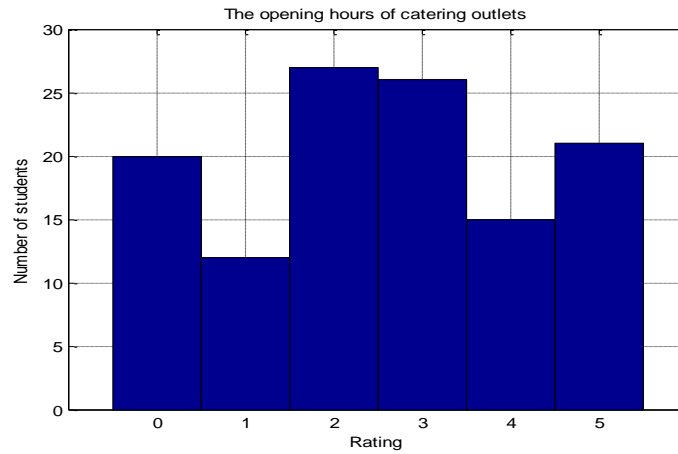


Figure 17: Opening Hours

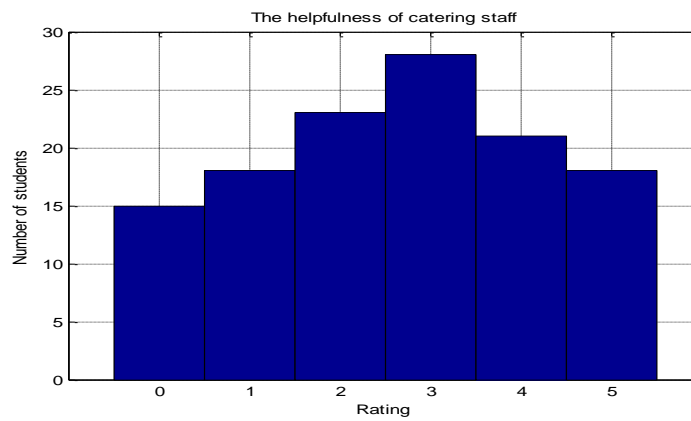


Figure 18: Helpfulness of catering staff

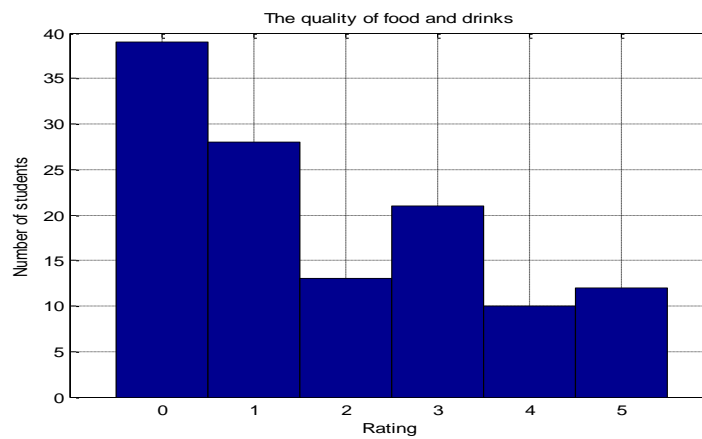


Figure 19: Quality of the Food



Figure 20: Price of the food

3- Computer Labs

Ten questions have been used in this category. As in the library service, the first question is used to measure the usage frequency of the labs. Figure 21 shows the result of this question. We can observe from the figure that 28% of the students do not use computer labs at all. However, 10% of the students utilize it more than 4 times per week and 18% utilize it 2-4 times a week.

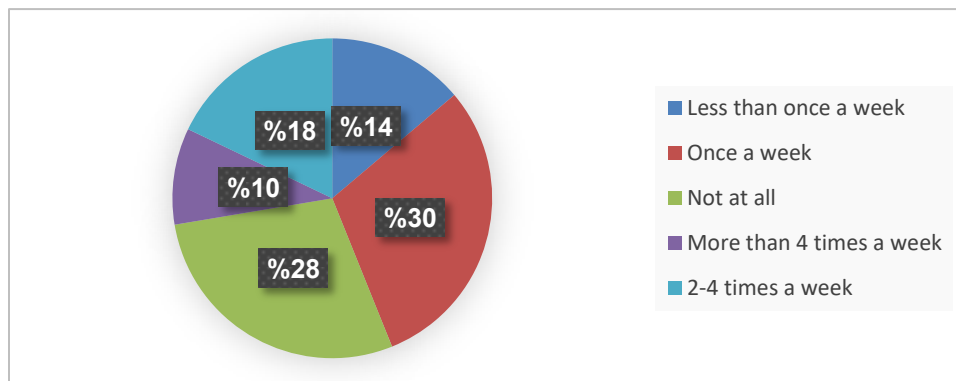


Figure 21: Computer Labs Usage

The remaining nine questions utilized in the section are:

- The number of workstations
- The operation of workstations (the number of workstations operating effectively)
- The speed of the computer systems
- The range of software available

- The printing services
- The opening hours of the computing labs
- The physical environment of the computing labs
- The helpdesk support
- The internet services

Figures [22-30] show the histogram results in this section. From the figures we can observe in the following table.

Table 1: Results of Computer Labs

Question	Satisfactory Percentage	Student Comments	Recommendations
Number of Workstations	48%	More devices should be added in the lab.	New scheduling for the opening hours for fairness usage of devices
The operation of workstations	50%	Devices are slow. A lot of viruses and user permissions not satisfied	The permissions of computers need to be enhanced
The Speed of the Computer Systems	53%	Devices are slow	Different OS and antiviruses should be installed
Software Availability	50%	Unavailability of all needed software packages	Providing more software packages which Adequate with the needs of students
Printing Services	45%	-	More printer should be added in the labs or in the bookshops
Computing Labs Opening Hours	48%	More time is required	New scheduling for the opening hours for fairness usage of devices
Computing Labs Physical Environment	57%	Some of the computing labs are hot in summer	Providing cooling systems in all computing labs
The Helpdesk Support	54%	-	-
The Internet Services	37%	Many sites are closed, such as, Youtube and Facebook	Enhancing the policy of computer center's firewalls

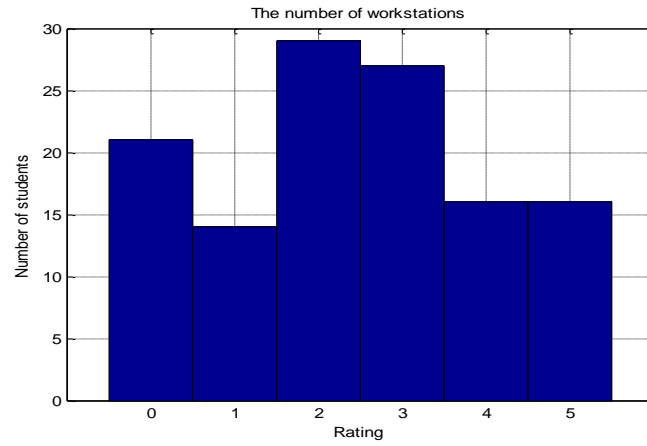


Figure 22: Number of devices

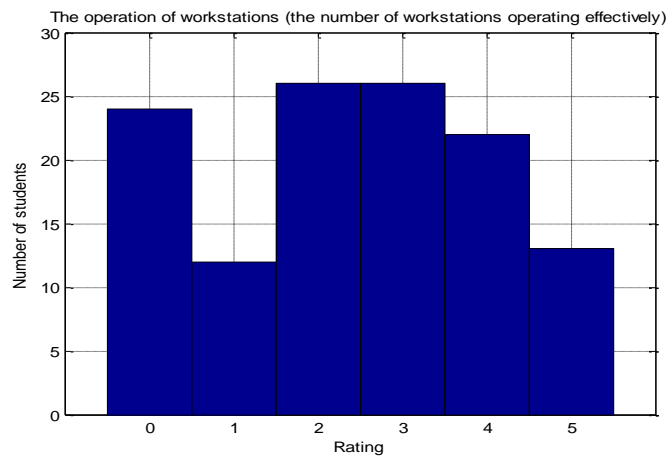


Figure 23: The operation of workstations

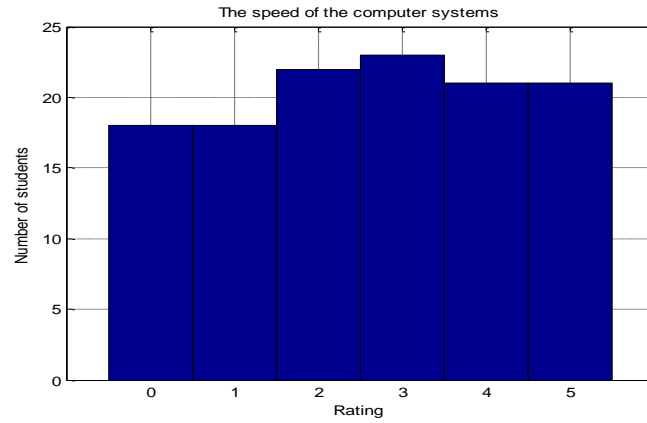


Figure 24: Speed

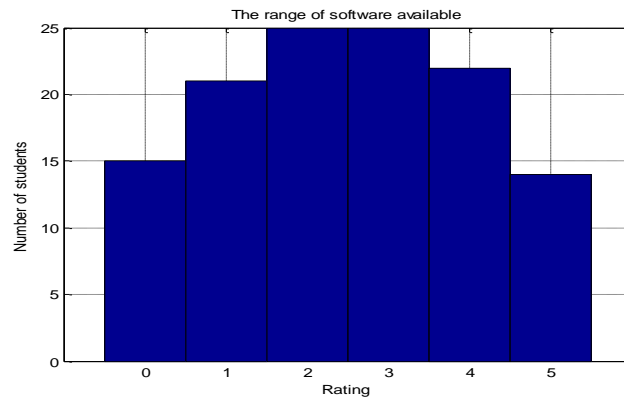


Figure 25: Software

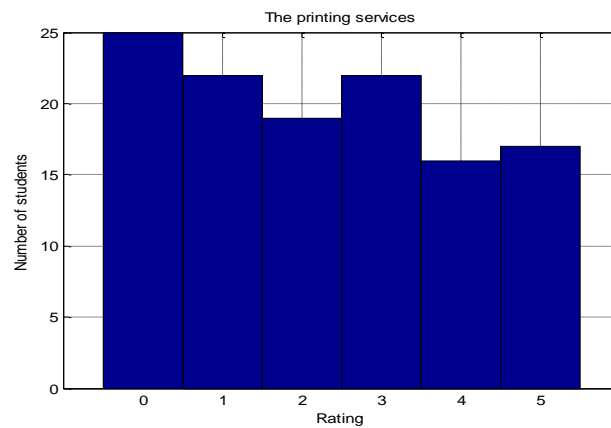


Figure 26: Printing Services

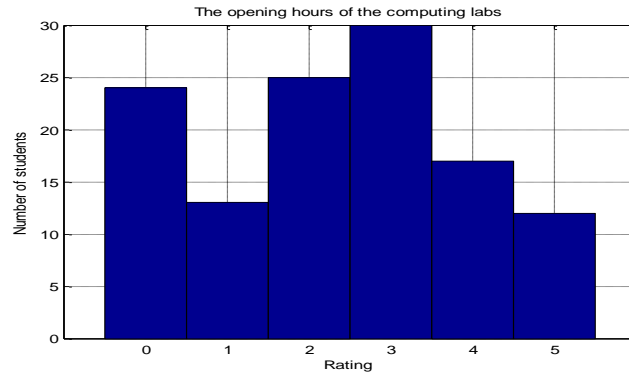


Figure 27: Opening Hours

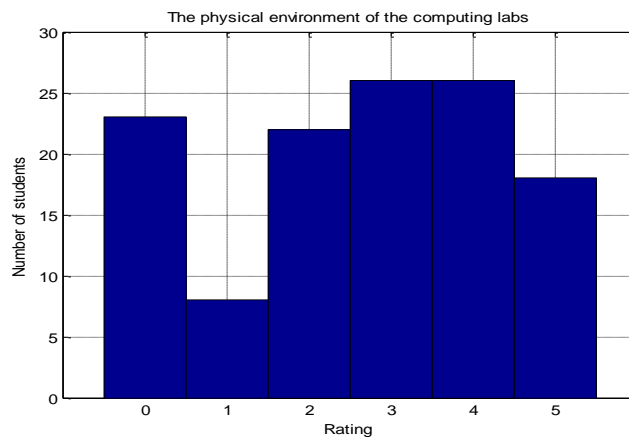


Figure 28: physical environment

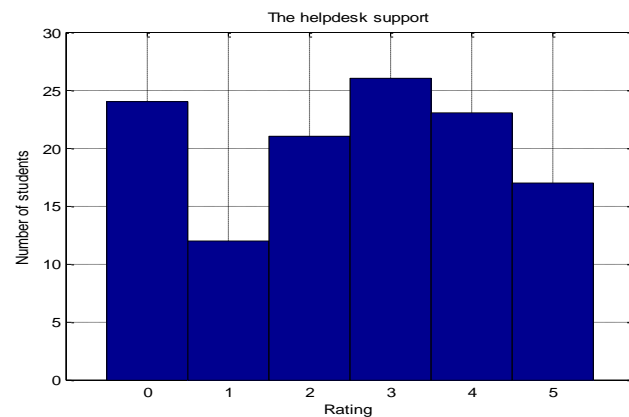


Figure 29: Helpdesk

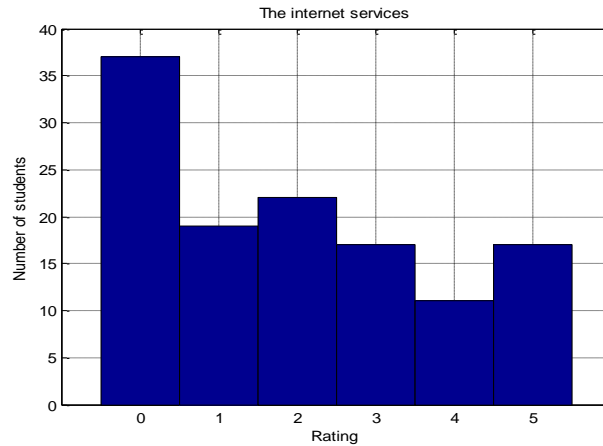


Figure 30: The Internet Services

4- University Support Services

Nine questions have been used to assist different services in the university, such as, bathrooms, transportations, teaching rooms and security. The following subsections show these services

4.1 The physical environment of the University

Figure 31 shows the histogram of results. We can observe that the satisfactory level is 58.6%. Some of the students did not understand the meaning of this question. However, if all students understand the meaning of this question, the percentage will be higher.

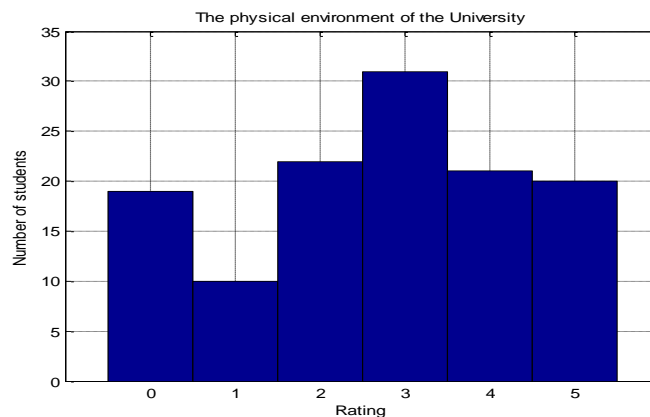


Figure 31: physical environment

4.2 The comfort of the teaching rooms

Figure 32 shows the histogram of results. We can observe that the satisfactory level is 53.7%. The reason behind this percentage is the hot weather in summer. However, this issue has been solved by installing new 3 fans in each class room in the building

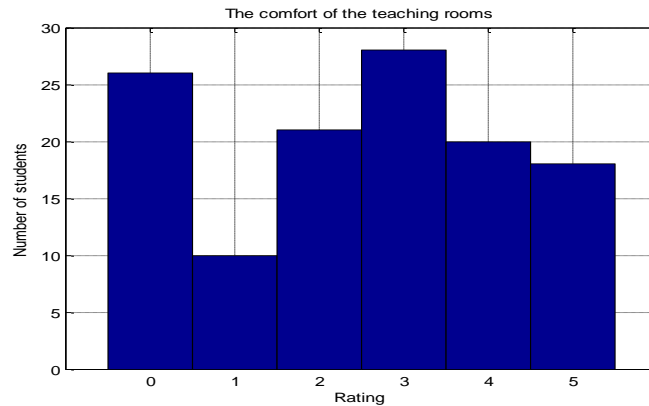


Figure 32: Teaching Rooms

4.3 The arrangements for your physical safety and security within the University

Figure 33 shows the safety satisfactory level of students. We can observe that more than 62% of the students are satisfied.

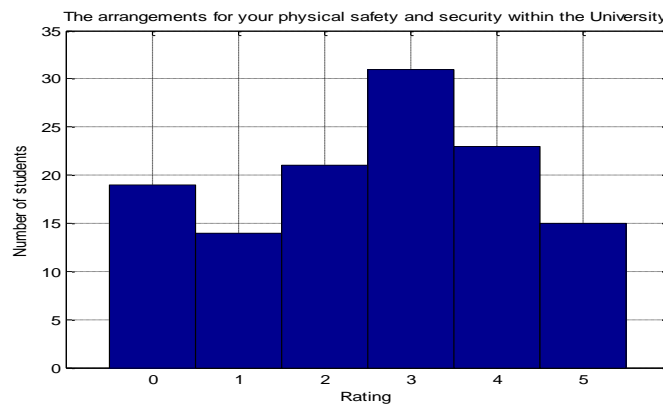


Figure 33: Safety

4.4 The maintenance and cleanliness of WC and washroom facilities

Figure 34 shows the histogram of results. We can observe that the satisfactory level is 60%.

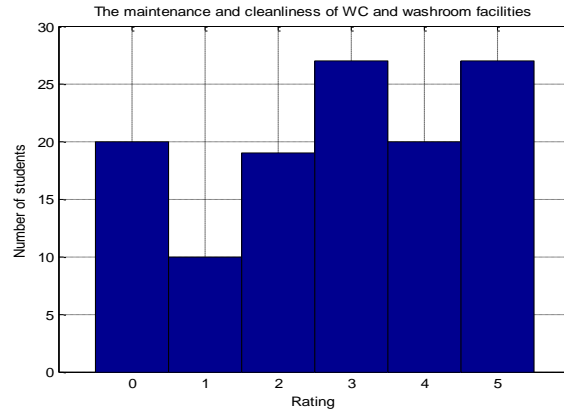


Figure 34: Bathrooms

4.5 Public transport links

Figure 35 shows the histogram of transportation satisfactory level of the students. We can observe that the satisfactory level is less than 50.4%. This service can be enhanced with new class schedules and adding more buses.

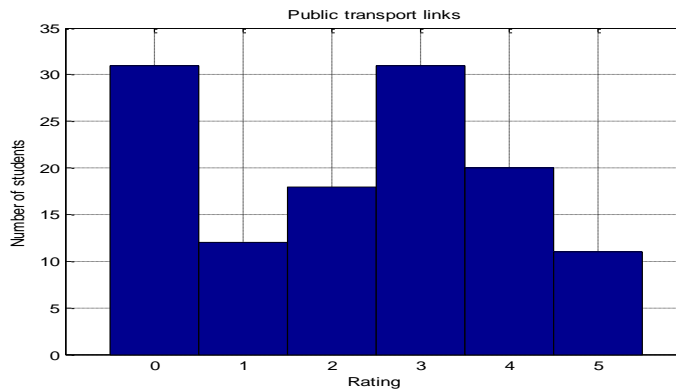


Figure 35: Transportation

4.6 The availability of Students Car Parks

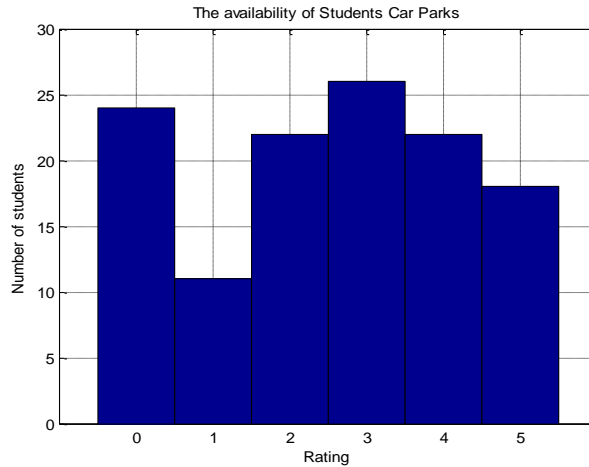


Figure 36: Car Parks

Figure 36 shows that 54.5% of the students are satisfied with the car parking in the university. The reason behind this is that parking is a first arrive service. If you are late you will find no place. Moreover, Figure 37 shows that almost 57% of the students are satisfied with the career advices and services they get from the university and the faculty.

4.7 The availability of careers advice and services

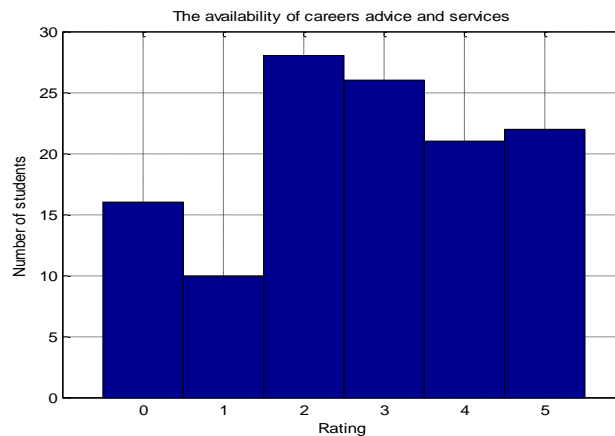


Figure 37: Career Service

4.8 The adequacy and fairness of the grant and scholarship system at ZUJ

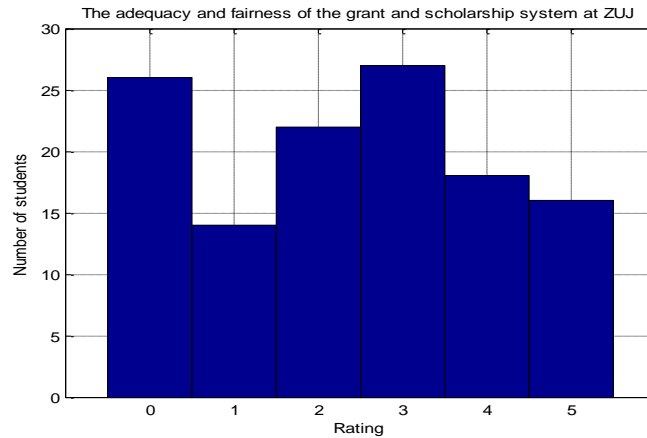


Figure 38: Scholarships and grants

4.9 The extent to which ZUJ introduced E-learning courses and methods for its students?

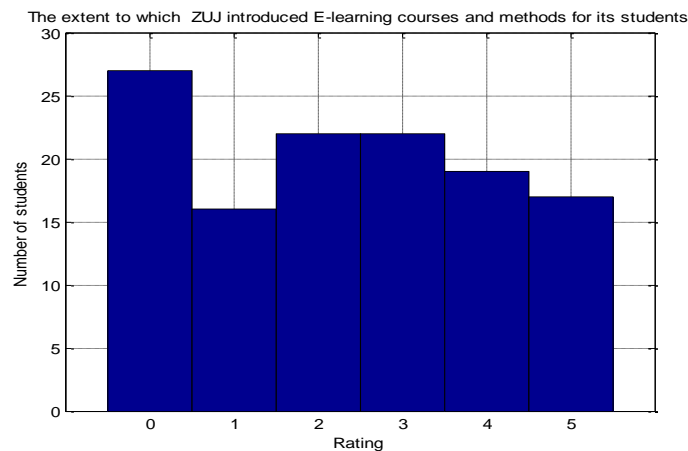


Figure 39: E-Learning Service

Figure 38 shows that almost 50.4% of the students are satisfied with the scholarships and grants system in the university. On the other hand, as shown in Figure 39 for the category of the E-learning service assessment, 47% of the students satisfied only. The reason is that E-learning service started this semester only and only few students utilized it. The number of courses in the E-learning service will increase with the time.

4.10 The sports and fitness facilities

The results for the sports and fitness facilities in the university is shown in the below figure, 51.2% of the students satisfied.

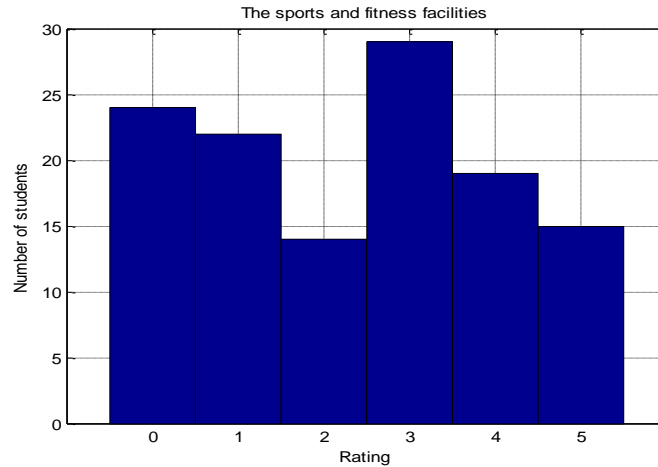


Figure 40: Sports and Fitness Facilities

4.11 The University Website

The results for the university website assessment is shown in the below figure, almost 48% of the students satisfied.

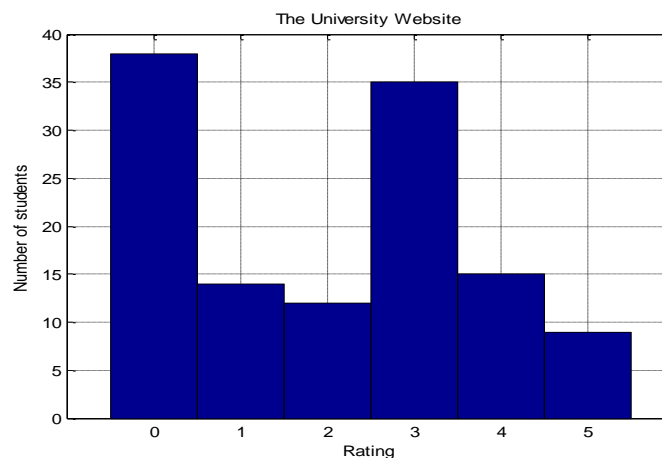


Figure 41: The University Website

5- Admission and Registration Services and Arrangements for Induction and Welcome

This is one of the most important services in the university. We assisted the opinions of our students in this service. Six questions have been surveyed to assist the quality of information and the simplicity of the registration procedure and arrangements for induction and students welcome. These questions are as follows:

- Which information sources encouraged you to apply to study at the University
- The information you received from the University prior to submitting your application
- The procedures for your registration with the University
- The provision of information during your induction week
- The usefulness of information provided during your induction week
- The general arrangements for induction and welcome

Figures [42-45] shows the histograms of the harvested results. An interesting result is how the students heard about this university. 18% of the students utilized the website of the university. This shows that the information that provided on the website should be accurate and fulfill all the needs.

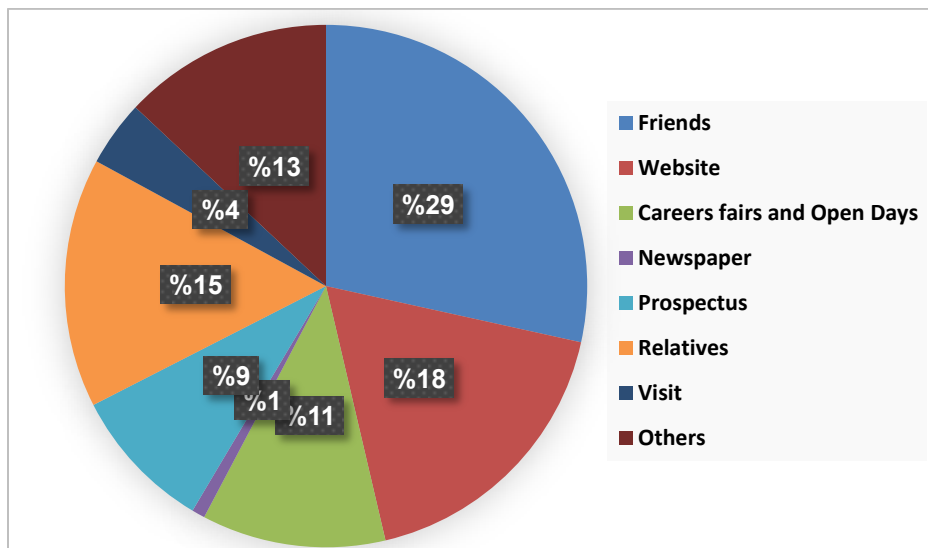


Figure 42: The Source of Information about ZUJ

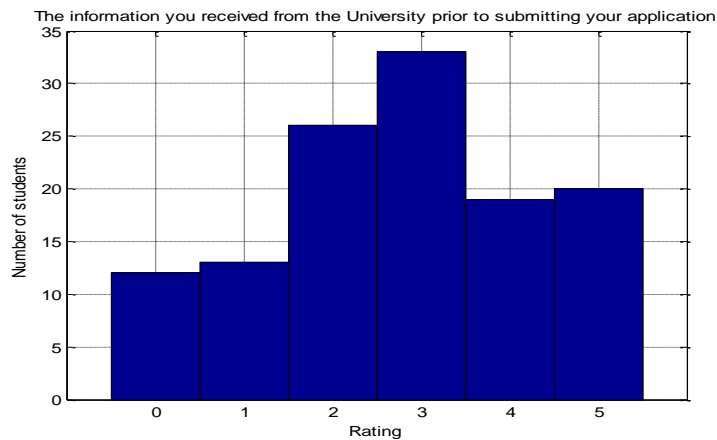


Figure 43: Application Submission

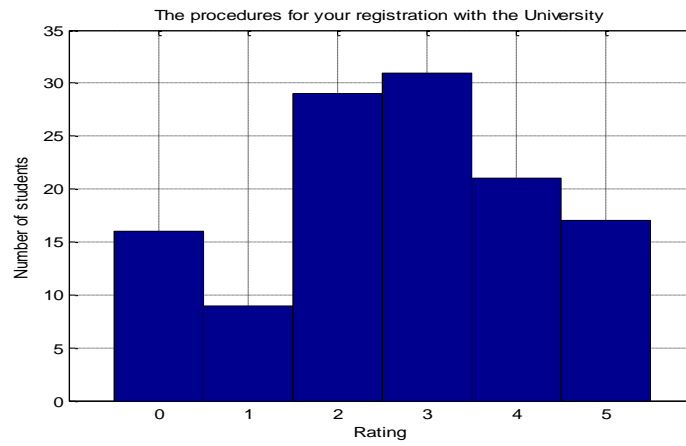


Figure 44: Registration Procedure

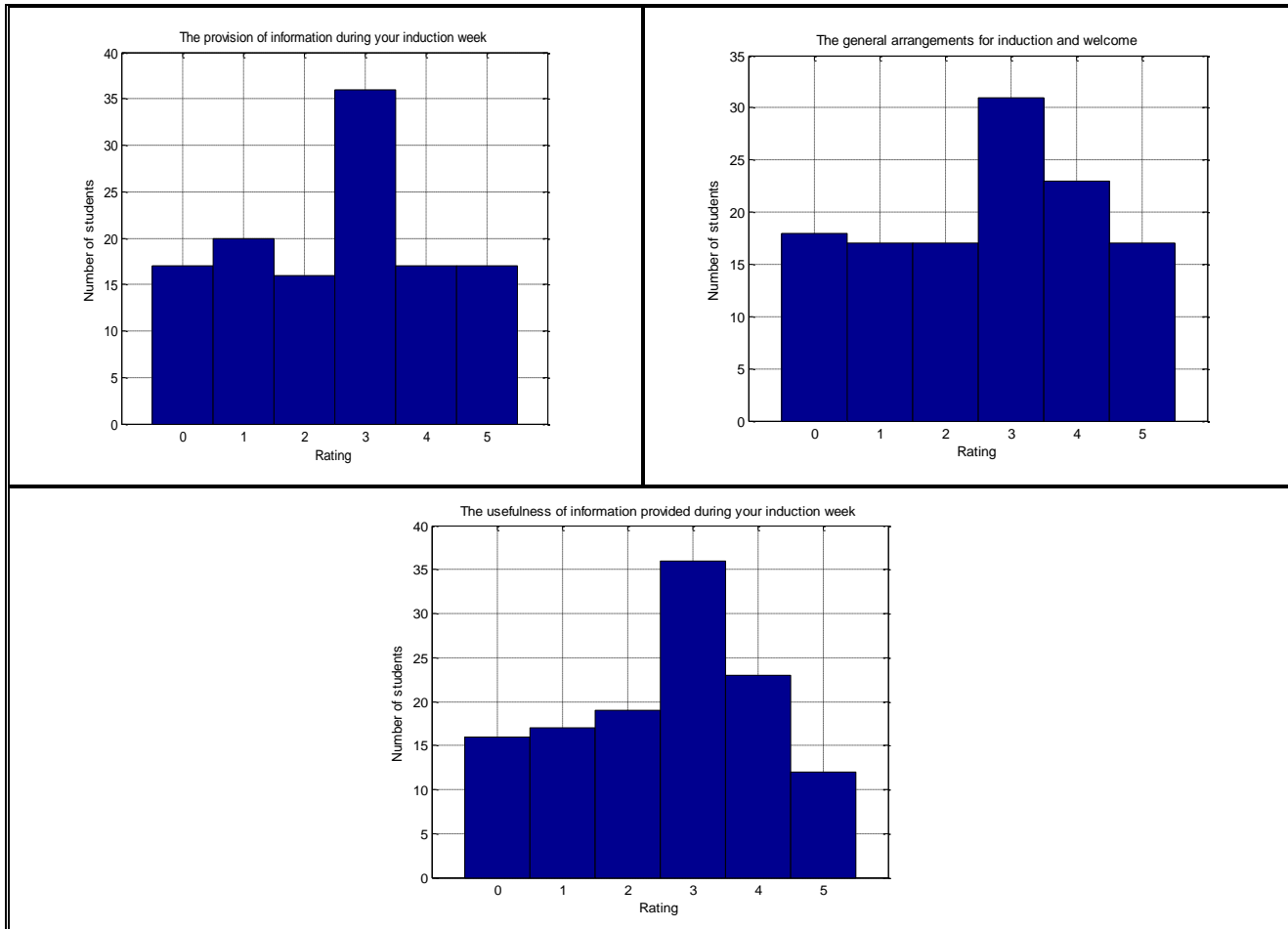


Figure 45: Arrangements for Induction and Welcome

6- Medical Center and Support for Students Suffers Physical Disability

Two questions have been used in this section. These questions are as follows

- If you have used the university medical center services, how satisfied were you with the support you received from them
- If you have a physical disability, a medical condition and/ or a learning difficulty, how satisfied are you with the help and support you have received from the University

Figure 46 and 47 shows the histograms of these questions, the results shows that 47.2% of the students satisfied with medical center services, and almost 40% of the students who suffers physical

disability, a medical condition and/ or a learning difficulty satisfied with the help and support you have received from the University.

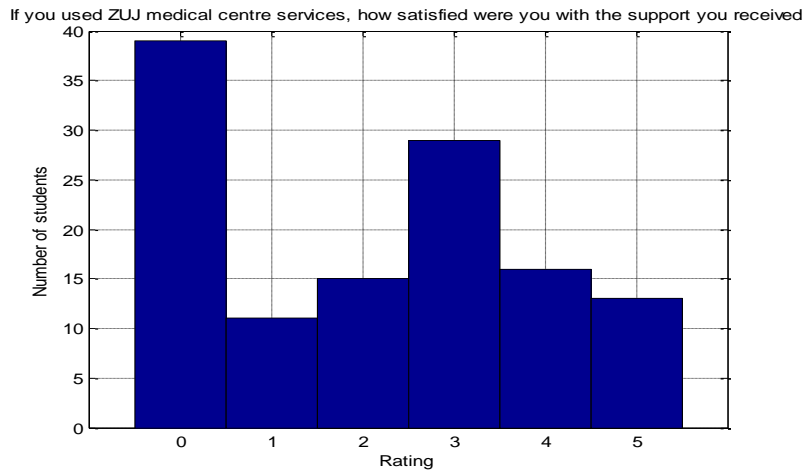


Figure 46: Medical Center

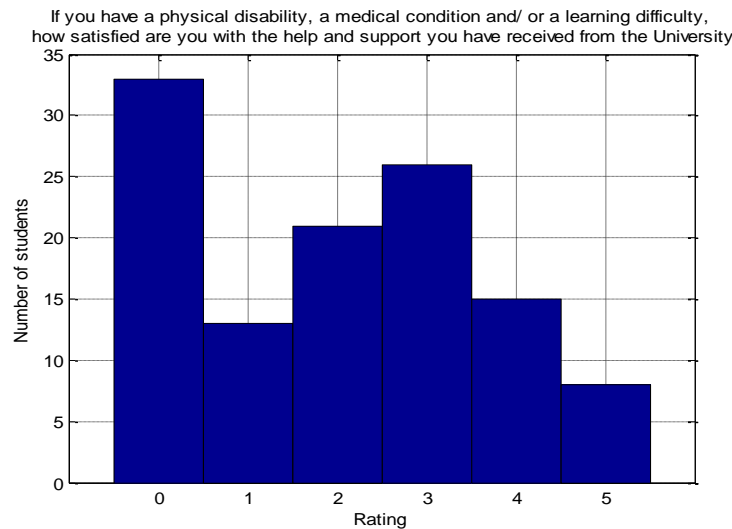


Figure 47: Disabilities

7- The Quality of Teaching Assessment

Eight questions used in this section. These questions results detailed in Figures [48-51], the questions, assists more than on Teaching Quality parameter, such as; the faculty members teaching abilities and interaction with the students, the overall quality of teaching assessment and the program impact in developing the student knowledge and skills, the supervision of graduation

projects, training and internship. These questions results are shown in Figure 48 and Figure 49 and there averages are shown in Table 2 with some enhancement recommendations.

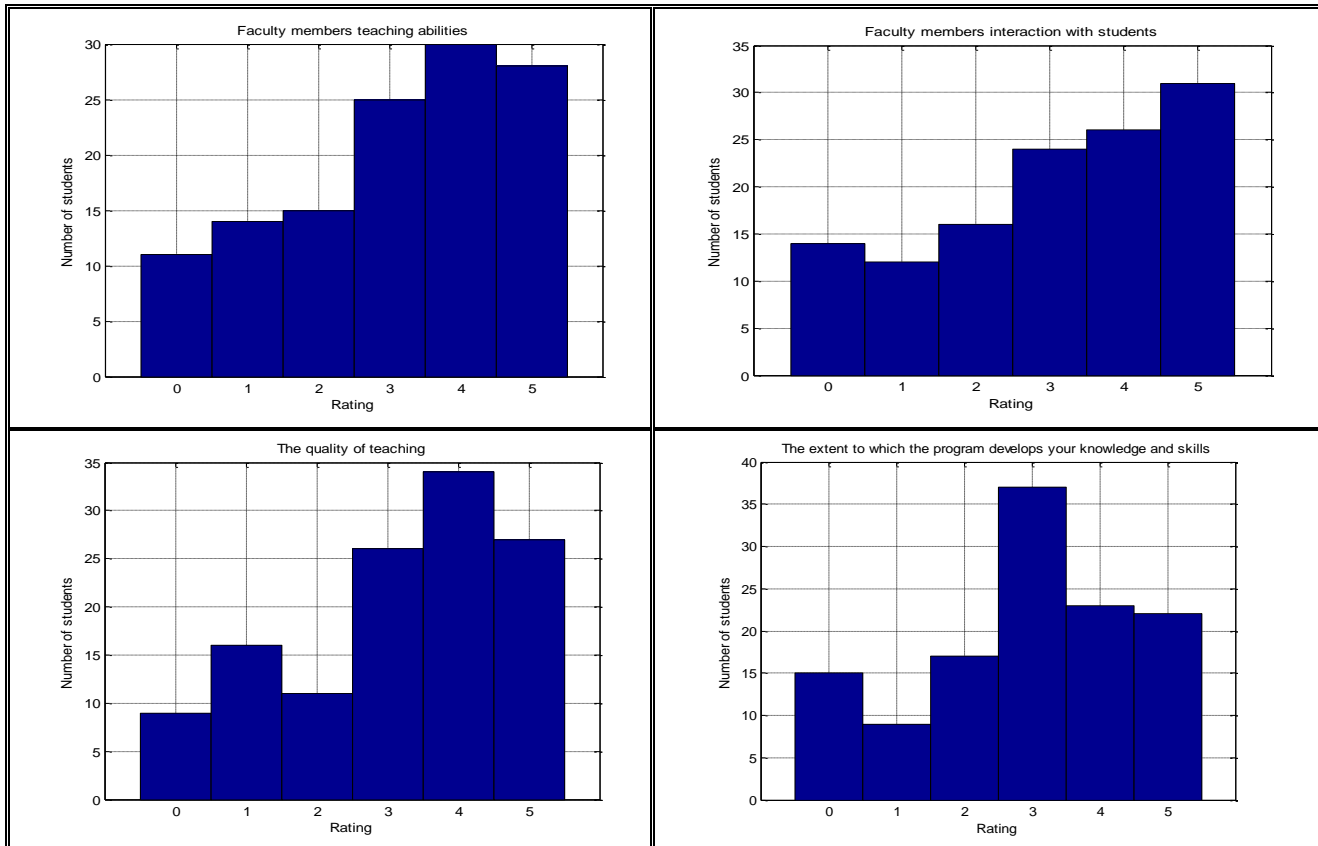


Figure 48: Teaching Quality

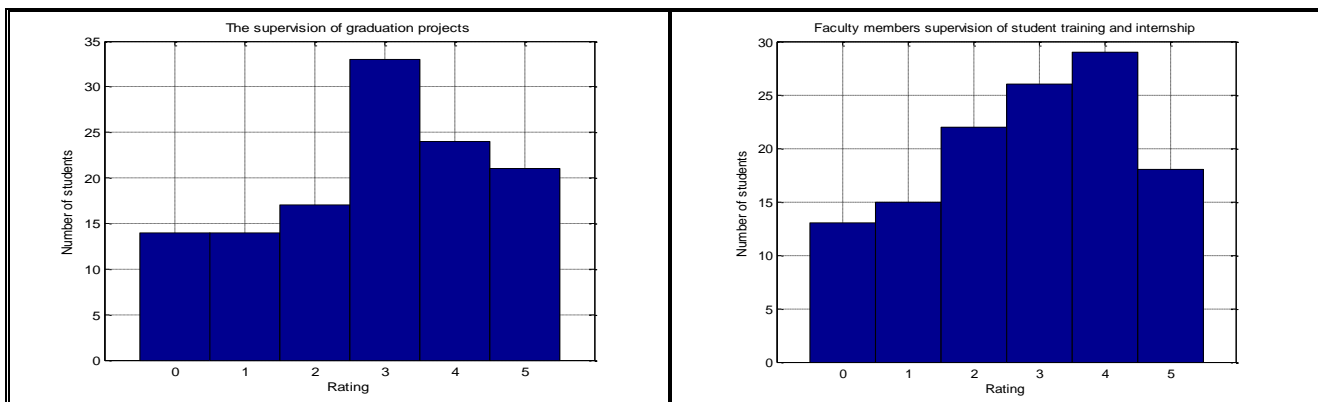


Figure 49: Supervision Information

Table 2: Teaching Quality and Supervision Information

Question	Satisfactory Percentage	Recommendations
Faculty member teaching abilities	67.5%	<ol style="list-style-type: none"> 1. Attendance at courses on teaching 2. Attendance at sessions on aspects of teaching, such as lecturing, running tutorials 3. Observing others teaching (learning by example) 4. Discussion of issues, such as planning and evaluating a session, with a respected teacher 5. Reflecting on one's own teaching and trying to identify what aspects are helpful to students' learning and which are not 6. Studying student feedback, whether written or verbal, and reflects it on teaching 7. Better understanding of what helps students to learn 8. Acquiring techniques—for example, on how to encourage participation or how to lecture effectively (for example E-learning benefits) 9. Gaining ideas on ways of structuring information to make it more accessible to students 10. Feeling more motivated and more able to engage in teaching
Faculty members interaction with students	65.9%	
The Quality of Teaching	70.7%	
The extent to which the program develops your knowledge and skills	66.7%	
The supervision of graduation projects	63.4%	
Faculty members supervision of student training and internship	59.3%	

Two more questions have been used in this section. To assess the support and advices the students receive and the adequacy of learning resources available for students the students are satisfied almost of 63% of these two important domains as shown in Figure 50 and Figure 51.

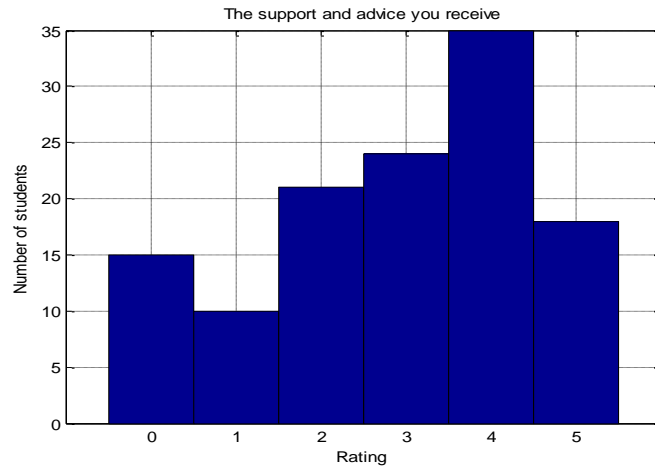


Figure 50: Supervision Information Overall Assessment

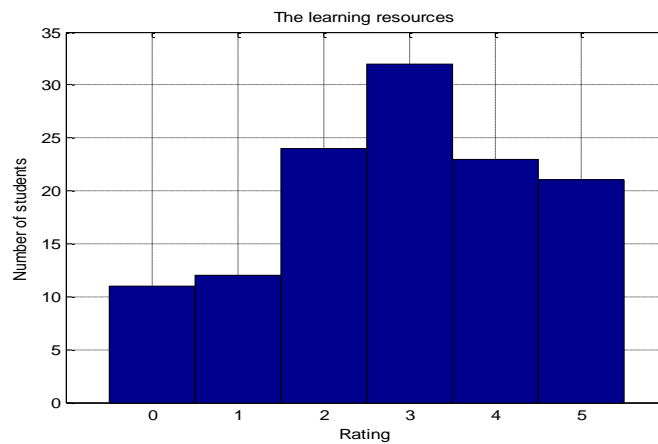


Figure 51: Learning Resources Assessment

8- The University Governance and Student Council and Union Assessment

Three questions used in this section. These questions results detailed in Figures 52.

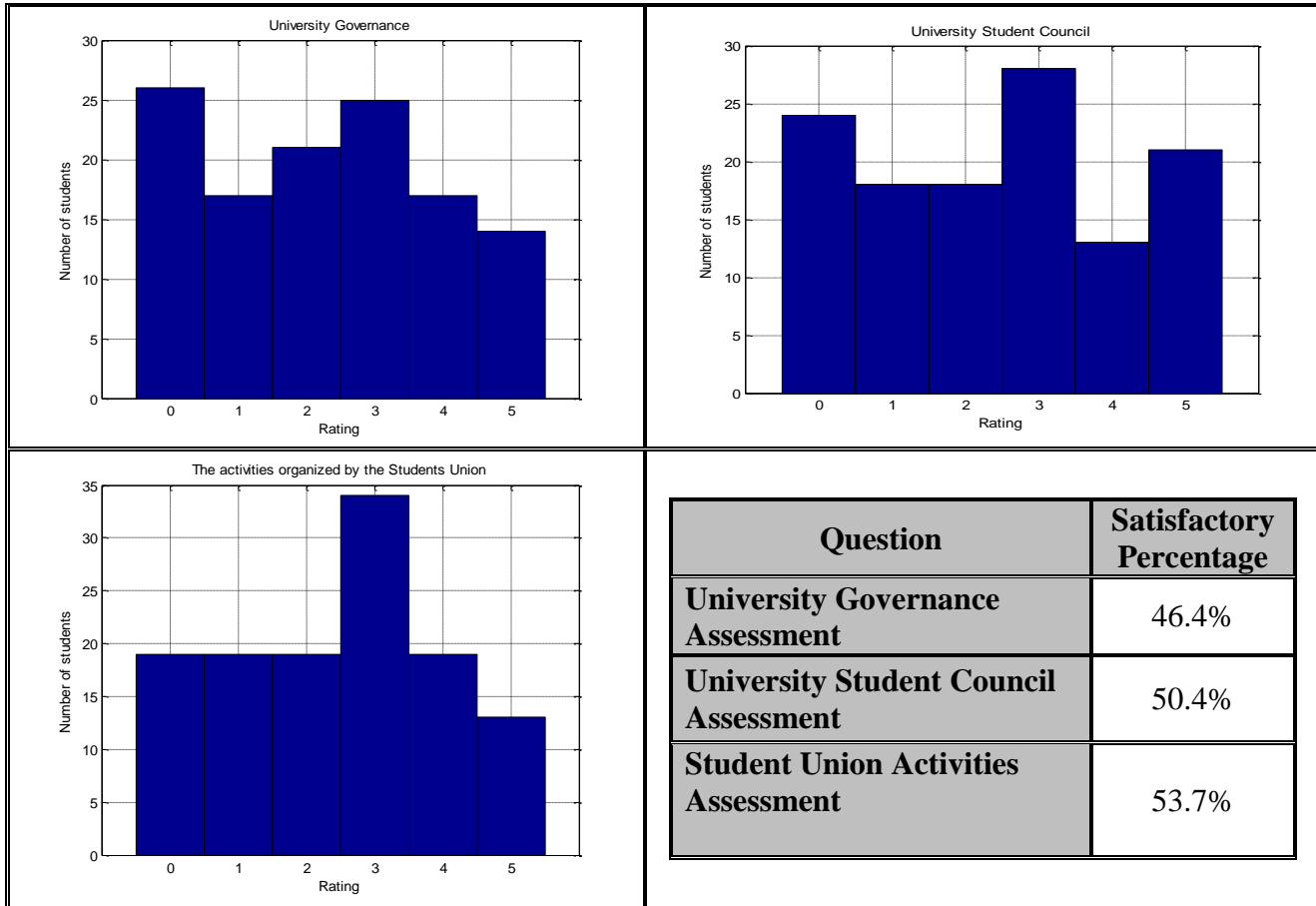


Figure 52: The University Governance and Student Council and Union Assessment

9- The Overall Assessment

The overall assessment of the University Performance is shown in Figure 53. And the average student facilities assessment for all previous questions in all sections in the Engineering and Technology Faculty is shown in Figure 54.

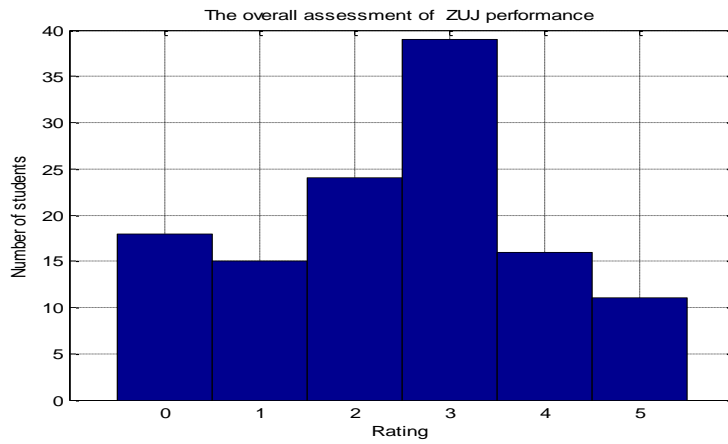


Figure 53: Overall Assessment of University

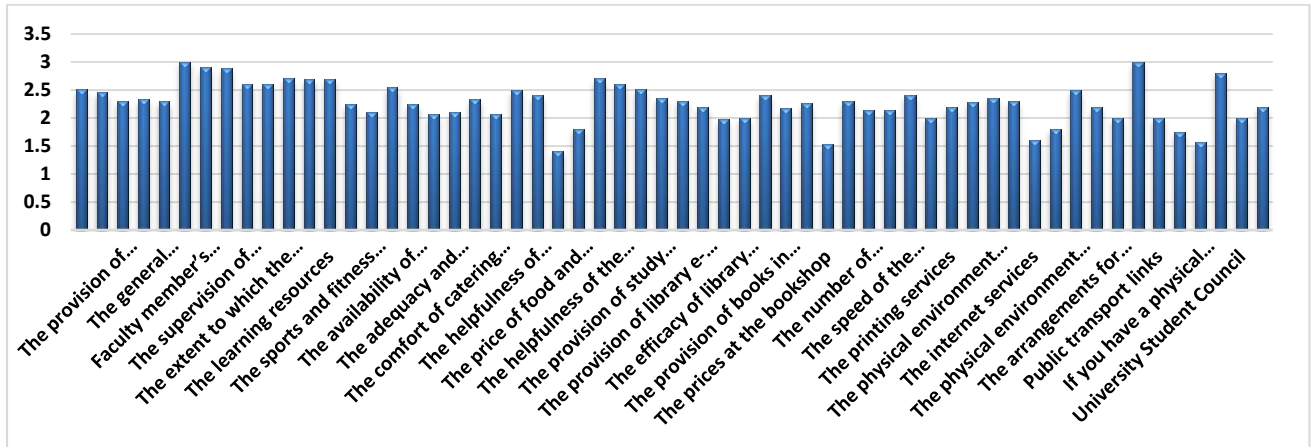
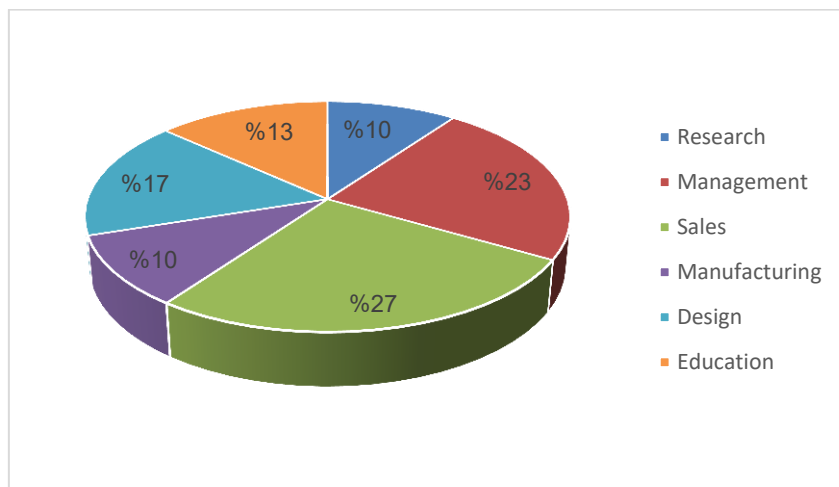


Figure 54: The Average Student Facilities Assessment in the Engineering and Technology Faculty

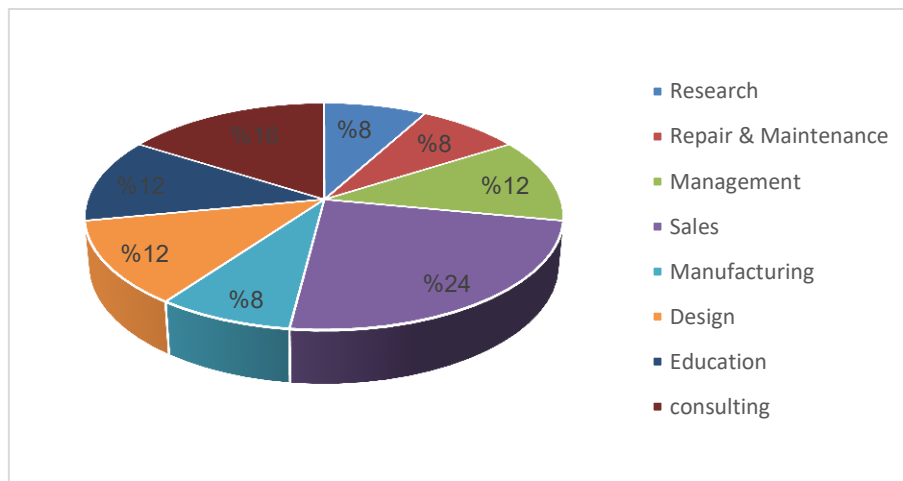
Employer Survey

According to the information that have been supplied from the academic department of the faculty of Engineering for the academic year 2017/2018, And according to the survey that have been done to the employer of the graduate of the faculty, the following are the questions and the results:

1- Please indicate your primary company functions:



2- In which of the following areas do you employ ZUJ Graduates:



3- How many ZUJ Engineering graduates are employed by your company

The average was 1.08

4- Does your company regularly recruit ZUJ graduates, if no reasons?

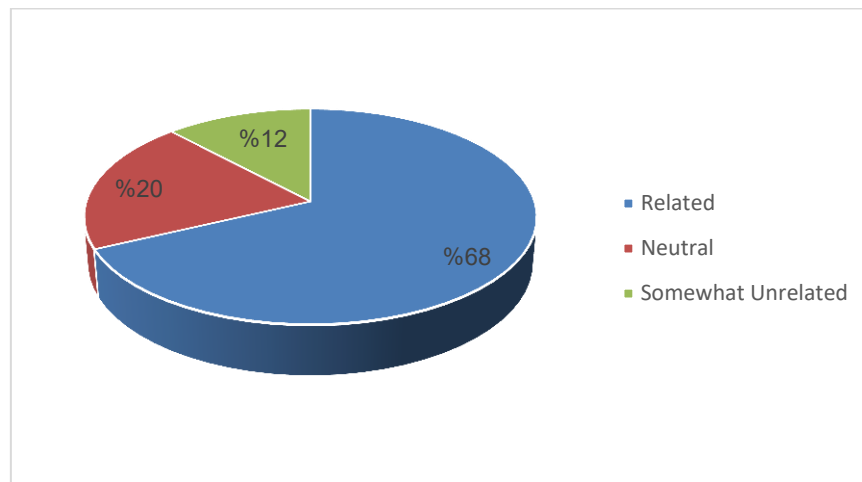
10% answered with Yes

90 % answered with No

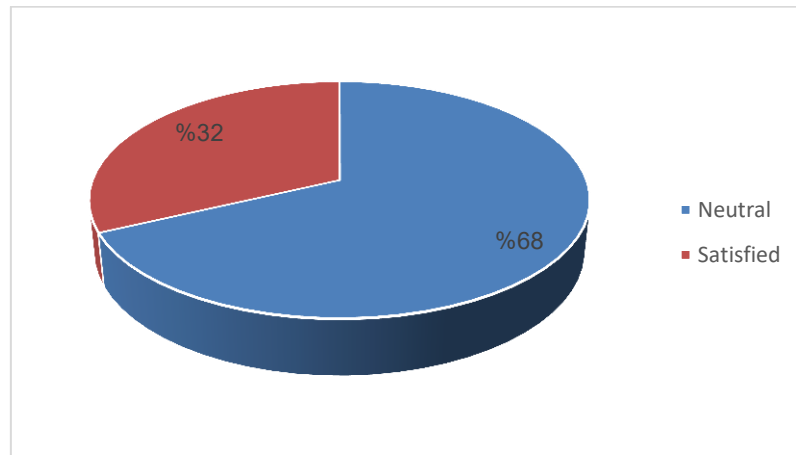
Reasons for No

- The company tends to test all the competent for any vacancy in a fair way, so ZUJ graduate has an equal opportunity with other universities graduate.
- The company prefers to recruit someone with experience.

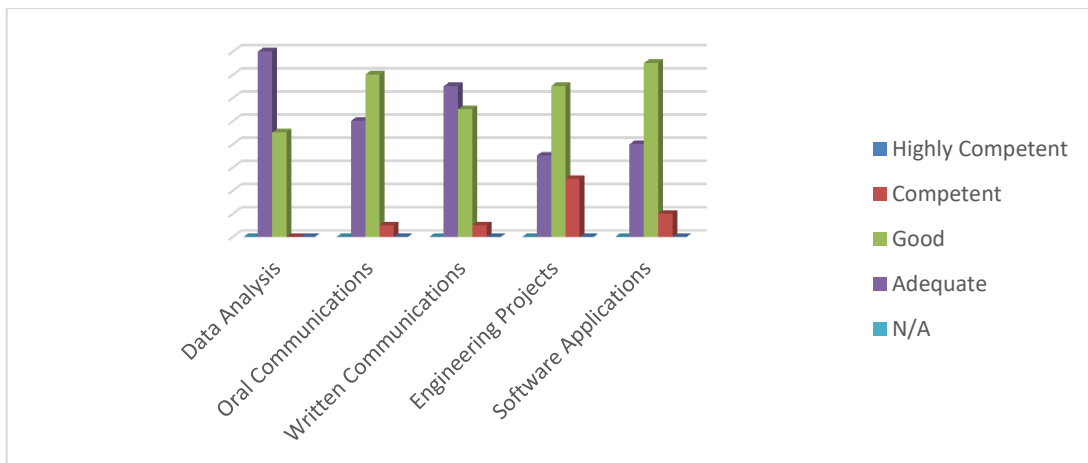
5- In your estimate, how well does the ZUJ graduate's education relate to areas of responsibility in which they work in your organization?



6- Overall, how well satisfied are you with the performance of the ZUJ graduates?



7- Using a Scale of “5” Highly Competent to “1” Not Competent, Please select the rating that you feel best describes the competence of ZUJ graduates in these curricular areas applicable to your company. (Use NA if the topic is Not Applicable to your company)



8- Rate your level of preparation as a result of your engineering education at ZUJ plus your work experience to date: to successfully identify, analyze, formulate, and solve engineering problems associated with your professional position, both independently and in a team environment

